

Sample Questions Exam 7 Canada

Question 41

1. Law may be incapable of producing an acceptable division
2. Economics of litigation
3. Restraints imposed by the judicial process itself.

Question 42

1. Consent of plaintiff
2. Default of plaintiff
3. Deliberate act of third person
4. Act of God
5. Legislative authority

Question 43

- a) Tort element
Cause in fact : question of fact
Proximate cause : question of law
- b) More time and attention was spent on proximate cause as it is a question of law
- c) Cause in fact : But-For-Test
No damage would have occurred but for the negligence of the defendant.
- d) Proximate cause test

Directness Test: If the defendant negligent action was a direct element in the chain of action that led to the damage.

Foreseeable test: If the defendant could reasonably foresee the potential damage to a neighbor plaintiff then he/she is guilty otherwise not.

Foreseeability is more forgiving as in the case of Wagon where an oil spill burned the whole harbor, this was not foreseeable so found not guilty

Question 44

They compare the expected cost of accident to cost of preventive measures to avoid the accident. If cost of preventive measures or social object is less than expected cost of accident, then liability is imposed:

$PL > B$

Where P is probability of loss

L is average severity should a loss occur

B is the burden of avoiding the loss

Question 45

Immune from tort liability if the activities are those of policy decisions.

Policy decisions take into consideration social factors, economic factors, political factors and budgetary allotments.

Question 46

- a) Non-economic damages arising from injury to plaintiff
- b)
 1. Pain and suffering
 2. Loss of amenities of life
 3. Reduction of life expectancy
 4. Duration of disability
- c)
 1. Functional approach: Attempts to compensate plaintiff for physical arrangements to make his life easier and more endurable.
 2. Conceptual approach: Views plaintiff's enjoyment of life as an asset, which is objective. If valued before and after the injury award is made for the value lost through injury.
 3. Personal approach: Compensates plaintiff for happiness lost through injury (valued subjectively)

Question 47

- a) Damages that are provided to the plaintiff as a form of personal/emotional compensation for the malicious or grossly negligent conduct of the defendant.
- b) Punitive damages punish the defendant. Aggravated damages compensate the plaintiff.

Question 48

- a)
- Public entities cannot easily curtail their activities
 - Public entities have taken the burden at increased litigation because they have deep pockets
 - People will suffer because fewer services will be offered
 - Public entities are not for profit organisations
- b)
- Discriminates against those with severe injuries
 - Does not satisfy the compensation principle
 - Public entity should serve as an example
 - Not necessary given the other reforms

Question 49

- a)
A worker who has more than 40 insured quarters but with less than 6 of which come from the last 13 quarters. Ex: someone who has 40 insured quarters overall and 4 in the last 3 yrs.
- b)
A worker older than 24, who has 6 insured quarters in the last 13 but less than 2 for each year since he is 21. Ex: a 26 yrs old worker who has 7 quarters, 6 of which come from the last 13.

Question 50

- a)
1. ADR lowers truncation costs for both parties
 2. Auto cases do not involve changing law so they can be handled adequately by a simpler process as alternative dispute resolution.
- b)
1. Law is still evolving
 2. Specialized litigators are required

Question 51

- a)
1. They represent a very high cost to provide compensation to plaintiff (up to 33%)
 2. May encourage lawyers to take frivolous suits to court.

- b) 1. They are a fair way to cover expenses of lawyer since he receives no compensation when he loses a case.
2. Allow plaintiffs who cannot afford hourly fees to recover damages or protect their rights.

Question 52

- a)
 - The social insurance is universal and doesn't need an extensive process of risk selection.
 - The intermediaries of social insurance are civil servants and need a different supervision than in private insurance.
 - Social insurance doesn't need to focus on solvency.
- b)
 - Need to protect insurance fund in both cases and to protect against overcompensation.
 - Problems to determine which events are covered and which claims from covered events are covered.
 - Problems with efficiency of claims settlement

Question 53

- a)

The federal government, with the fed. Ins. Act, stated that an insurance company operating in more than one province had to be federally licensed.
- b)

The committee determined that the act was "ultra vires"(i.e. beyond the powers of that government). (because the "regulation of trade & commerce", which is a power of the federal government, applies to intraterritorial, not extra-territorial.)
- c)
 1. The federal Parliament modified the criminal law to say that it was an offense to solicit insurance business without a federal license.
 2. The federal Parliament said that, under the Federal ins. Act a British or Canadian insurer operating in one province & having a license from that province, had to comply with certain sections of the Federal act.

Question 54

- a) A person must be fully indemnified, but must not profit from a loss by getting more.
- b) To avoid moral hazard created by persons inclined to cause a loss in order to profit from it.

Question 55

Election: the injured selects his source of compensation: tort or collateral

Cumulation: the injured can receive from both sources and is allowed to be over-compensated.

Reimbursement: the injured must reimburse the collateral source once he has recovered from the tortfeasor.

Relief of Tortfeasor: any amounts received from a collateral source are used to decrease the amounts due by the tortfeasor.

Question 56

- i. There is no precedent to pardon a person who has done prime facie evidence of discrimination.
- ii. Insufficient excuses:
 - 1. Superintendent did not require statistics: not acceptable as an excuse.
 - 2. Small firms may not be able to eliminate discrimination from their rating: not acceptable as an excuse.
- iii. The failure to demonstrate does not mean that no alternatives exists.

Question 57

- a)
 - 1. Reduce adverse selection
 - 2. Avoid cross subsidies
 - 3. Promote loss control
- b) System that balances actuarial/economic benefit of classification with incremental cost of obtaining info.

Question 58

1. National flood insurance program
 - government provides coverage
 - companies sell/administer
2. Crop insurance
 - government provides reinsurance facility to private market

Question 59

- a)
 - height of the building
 - age of the building
 - soil condition
 - occupancy of the building
- b)

Average value of the car & number of vehicles insured & a percentage that represents the expected loss
- c)
 - Track record of the reinsurer in terms of timely reimbursement following a catastrophe
 - Time it has been in existence
 - Financial strength
 - Earnings of reinsurer

Question 60

1. It is hard to attribute a loss to a single accident year, since environmental losses typically affect several accident years.
2. Because of such factors as regulations and laws, development and general unpredictability of environmental claims, losses are not independent. Sudden changes like a new lawsuit by a PRP affect all accident years at once, thus rendering traditional loss development techniques useless.

Question 61

1. Generic substitution means that lower-cost “no-name brand” medication is provided instead of the brand name prescribed. The generic medication contains the same active ingredients as the brand name.

2. Therapeutic substitution means that the prescribed drug is replaced with a lower-cost one that provides the same therapeutic benefits but does not necessarily contain the same ingredients.

Question 62

1. Universality
Insured services must be provided to all qualifying residents.
2. Portability
 - Coverage must be available within 3 months when changing province
 - Coverage must be available when temporarily visiting another province.
3. Public Administration
Must be administered by a public-entity (non-profit)
4. Accessibility
Access to insured services must not be limited by deductibles, user fees, etc.

Question 63

1. Comprehensive systems approach
2. Online adjudication for drugs
3. Utilization review
4. Data analysis

Question 64

- a)
To provide benefits to an injured person when two separate actions cause a greater injury together than the sum of both alone. Will pay for the difference.
- b)
 - encourage hiring of handicap persons
 - fair allocation of costs of providing benefits.

Question 65

1. The filing must identify the source of the data and
2. Provide an explanation of its applicability to the circumstance.

Question 66

The actuary has reviewed the data underlying the rate filing for reasonableness and consistency and he/she believes the data is reliable and sufficient for the determination of the indicated rate changes.

The indicated rate changes have been calculated in accordance with accepted actuarial practices.

Question 67

1. Refined pricing analysis: would not eliminate the problem, but would help to justify the practices of insurers (i.e. use of 5 digit zip code). It includes risk selection, risk classification and use of non insurance data.
2. Underwriting Practice: eliminate underwriting criteria that do not seem to be objective. Criteria also need to reflect causality relationship, not only statistical justification.
3. Review of geographic mix: explain why there is a difference between the company distribution and the industry distribution. Some factors create difficulties.
 1. high number of under insureds in urban areas
 2. collection of non insurance data

Question 68

- The weather in each jurisdiction may be different and affect the types of claims
- The mix and ages of the vehicles can be different
- Attitude of the public towards insurers may also be different
- The road design also differs by jurisdiction

Question 69

- a.
 1. In no fault, fault is still used for criminal reasons.
 2. In no fault, fault is used for rating criteria.
 3. In fault insurance the person at fault does not pay for damages, his insurance company does.
- b. Liability insurance for fault.
Injury insurance for no-fault.

Question 70

- a. Reinsurance facility
Joint underwriting association
- b. RF: based on rates of the individual company providing insurance
JUA: based on the experience of all those in the JVA

- c. RF: shared equally among insurers based on participation in the voluntary market as well as participation in the facility.
JVA: based on voluntary market participation.

Question 71

- a. A cap is when the company gets paid cash if the interest rates go above a certain threshold. A company may want a cap to offset the losses in value of its bond portfolio as interest rates rise.
- b. A floor is when a company gets paid cash if interest rates drop below a certain threshold. Needed when the company expects a large sum of money to be received in the future. As int. rates drop, they will not be able to get a good return, so the floor will give them more money to invest.

Question 72

- a) A repurchase agreement is when an insurer buys a particular security with the understanding it will be bought back at a later date for a specified price.
- b) 1) minimum transaction costs
1) flexible term
2) avoid supply constraints of other money market instruments

Question 73

- a. High quality bonds of class 1 or 2 are recorded at amortized value.
- b. Low quality bonds, lower of amortized value or market values
- c. Market value
- d. Real estate at lower of [Market value,(Cost + improvements – depreciation)] less Encumbrances

Question 74

Invalid

Question 75

- a. No, because the statutory numbers are the actual amount of capital invested in the insurance company.
- b. 1. Amount of equity in the unearned premium reserve.
2. Amount of discount in the undiscounted loss reserves.
3. Amount of capital required by the RBC formula.

4. Probability of ruin of a company/cat potential.

Question 76

Page 2.

Cash $\rightarrow 100 * 50 = 5000$ increase

Assets 5000 increase

Page 3.

Paid in capital $\rightarrow (50 - 40) * 100 = 1000$ increase

Less treasury stock $\Rightarrow 100 * 40 = 4000$ decrease

Surplus increase of 5,000

Question 77

- i. Reconcile the undiscounted to the discounted actuarial liabilities in order to disclose the provision for adverse deviation.
- ii. Rates of interest used to discount
- iii. Ave. term to settlement for the occurrence and reporting dates of the claims included in the actuarial liabilities.

Question 78

Retroactive reinsurance.

- a. Premium paid $>$ losses
income would be hit immediately as a loss would be recognized.
- b. Difference between loss and premium paid should be put up as an asset, and gain should be amortized in the income statement using pattern expected to apply to outstanding losses.
- c. Contract will not be recognized as reinsurance, but as a financial contract and deposit accounting would apply. There would be no timing risk.

Question 79

- a. It is the difference between the interest rates on the security and the interest rate of a government bond matching the duration of the security.
- b. $7\% \times (1 - 0.12) = 6.16\%$
PFAD = $7\% - 6.16\% = 0.84\%$

Question 80

- Describe the significant risks for the company.
- Disclose the policies used to monitor these risks.
- Disclose the responsibilities of senior management and the board of directors.

Question 81

Part 1 – List each class of expense (rows) ie LAE, advertising LAE etc and allocates it to a function expense category (columns) – IEE expand function expense category found in the AS from 3 to 5. It includes 1. LAE, 2. Acquisition, supervision, field etc expense, 3. General expenses 4. Taxes, licenses, fees, and 5. Investment expense.

Part 2 – breaks down of the functional expense by lob on a net basis, this includes breakdown of n/w profit and total profits for each line of business

Part 3 – breaks down the functional expense by lob on a direct basis, this includes a breakdown of underwriting profit but not total profits. Investment gains are only allocated in Part 2

Question 82

A.	Voluntary	FA	Total
UPR	150K	10K	160K
Expected clms	100K	9K	109K
Maintenance			
Expenses	(.25)(UPR) = 3.75K		3.75K
Internal			
Adj. exp	.035(expected claims)		3.5K
Disc factor	.978	.978	

B. Total Exp Disc. Costs
 Voluntary
 $= 1000 ((100 + 3.75 + 3.5)(.978))$
 $= 104.89$

FA
 $9K(.978)$
 $= 8.802K$
 Total = 113.692

EQUPR A – B
 46.308

Question 83

- a. Co internal audit group: they are responsible to produce the supporting information for external auditor and audit committee. First line of attack to make sure that proper business rules are followed.

- b. Share holders auditor: they are independent of the company (and here below referred as auditor) they should review the accuracy of the figures displayed in the annual statement. Indicate if a fair presentation was made.
- c. Audit Committee: Set up by the board of Directors, this committee is composed of at least 3 directors. They should review the investment strategy and controls of the company. Discuss with the auditor and actuary. Review compliance.

Question 84

- a) Liquidity risk is the risk that the entity may not be able to meet its cash flow requirements.
- b) Disclosure
 - Asset and liability matching strategy
 - Procedures used to ensure that there are sufficient liquid assets on hand
- c) No difference
 - The reporting method differs but the requirements for disclosure are the same.

Question 85

Property	Undercounted	Discounted	(200 000 x .95))
Claim Liab.	200 000	190 000	
PFAD		<u>19 000</u>	(190 000 x .10)
Total		209 000	
Liability	210 000	157.500	(210 000 x .75)
		<u>31 500</u>	(157 500 x .20)
		189 000	

Total combined % impact of Discounting & PFAD

$$\frac{(209\ 000)+(189\ 000)}{(200\ 000)+(210\ 000)} = 0.970.731707$$

or
-2.927%

Question 86

- a)
 - Premium tax
 - Sales tax

- Minimum capital tax
 - Tax on self insured plans
- b) If self insured retention is high, premiums will be lower, reducing the premium tax. The other taxes mentioned in a) do not apply to Alberta.
- c) The plans will now be taxed as if they were carried out through an insurance arrangement.

Question 87

- Investment risk is not considered. Now, a factor is applied to investment assets
- Long term and short term liabilities are not distinguished. Now, different factor is applied depending on the type of business
- Off balance sheet risks are not considered. Now, these are considered in the calculation

Question 88

- a. 1. Credit: risk, that the balances from reinsures will not be recoverable when due (default from reinsurer)
2. Actuarial: risk that the amounts recoverable are misestimated.
- b. 1. 2% applied to unpaid claim liabilities ceded to registered insurers.
2. 0.5% applied to ceded unearned premium balances and other recoverable

Question 89

- a. Must provide a letter to the board of directors and to OSFI indicating why employment has been terminated.
- b. Must indicate to company management, the risks to the company's health that require rectification
- If not rectified, the actuary is to send a letter to OSFI, with the board's knowledge, that actions against materially adverse matters have not been undertaken.
- c. The board of directors may be liable for not insuring that appropriate actions are undertaken.

Question 90

- a. To inform that insurers licensed in Quebec must provide annual return with certificate of an actuary by March 1 for insurers and March 15 for reinsurers.

b. full report of the actuary

Question 91

$$\begin{aligned} \text{A) u/w ratio a} &= (21.5+2110=7) / (31+30) \\ &= 59.5/61 \\ &= 97.5\% \end{aligned}$$

$$\begin{aligned} \text{u/w ratio b} &= (23+22.5 + 9 = 12)/(32+26) \\ &= 665/58 \\ &= 114.7\% \end{aligned}$$

B) Insurer B

1. insurer b is more profitable when considering investment income
b: $32-23-9+8 = 8/32 = 25\%$
a: $31-21.5-10+6=5.5/31=17.7\%$
2. Increase in net premium earned
A: $1/30 = 3.3\%$
B: $6/36 = 23\%$
3. Higher market price to book ratio: investor are happy with return of this company and they expect profit to increase

Question 92

- a) Invalid
- b) Acceptable result is $\leq 15\%$

Question 93

1. Tool of solvency regulation – regulators and insured can use the RBC requirements to tell how much surplus they need to maintain. Not prohibited by NAIC
2. Pricing – RBC requirements could be used by insurers in their return on equity rating system. This use is prohibited by NAIC
3. Rating insurers – companies with better RBC results could be identified by rating organization or marketed as stronger financially. This use is prohibited by NAIC

Question 94

- a. Financial condition is the prospective ability of an inquirer at given date to meet its future obligations with respect to policy holders, creditors, etc.

