INSTITUTE OF SINGAPORE CHARTERED ACCOUNTANTS

ISCA Infrastructure & Project Finance Qualification

Contracts and Modelling

Sample Questions and Answers

i. Multiple Choice Questions

Questions	Answer	Explanation
1) Which of the following is not a PPP contract? a. Design-Build (DB) b. Design-Build-Operate (DBO) c. Rehabilitate-Operate-Transfer (ROT) d. Private Finance Initiative (PFI)	a	Design-build contracts are short term contracts which do not create long-term performance incentives as PPPs do.
2) Which of the following should not be used as a key performance indicator to determine payments to a water treatment plant PPP project? a. Equipment unavailability measured in hours per year b. Percentage of water tests that meets the quality standards required by the government c. Number of people having access to drinking water in the area surrounding the water treatment plant d. Volume of water effectively treated in a given period measured in m3/day	c	Measuring the number of people having access to drinking water is not a relevant KPI for a water treatment plant. A water treatment plant is responsible for producing drinking quality water but not for its distribution.

Questions	Answer	Explanation
3) Which of the following payment mechanisms exposes the private party to the greatest degree of demand risk? a. The government makes availability payments to the private party b. The private party collects fees directly from service users c. The private party collects fees directly from service users and receives additional payments from the government if the amount of fees collected is below a certain threshold d. Answers B and C above	b	The fees collected by the private party will depend on the demand level for such services. A guaranteed payment structure under option c exposes the private party to some demand risk, but less than in Option b, as they are guaranteed to receive a certain amount of revenue regardless of the demand level.
4) Which of the following is least likely to require a competitive neutrality adjustment? a. Land tax b. State tax c. Personal income tax d. Stamp duty	c	Taxes including national or state income, land tax, local government rates and stamp duty are examples of advantages or disadvantages that government or related entities may enjoy relative to the private sector, that require an adjustment to ensure a neutral comparison. Personal income taxes are incurred by individuals and are irrelevant to competitive neutrality calculations.

Questions	Answer	Explanation
5) Which statement is TRUE? a. The government may choose not to retain all residual risks that are not transferred out to the private sector b. Adding the Net Present Cost ("NPC") of Retained Risk to the NPC of private bids would distort the true cost to government under a partnership model c. All bids and the PSC have the same level of retained risk d. Transferred risk in a PSC measures the value of the risks to be borne by the private sector over the life of the Project	d	• Any risk not transferred are by default, retained by the government ("Retained risks"). Hence (a) is False. • The Net Present Cost ("NPC") of Retained Risk should be added to the NPC of private bids to determine the true cost to government under a partnership model. Hence (b) is False. • Each bid and the PSC can have its own level of retained risks. Hence (c) is False. • Transferred Risk in a PSC measures the value that is transferred away from Government to the private sector under a PPP model. Hence (d) is True.
6) What is the definition of LLCR? a. LLCR = NPV of CFADS over project life / Debt balance b. LLCR = Cash Flow Available For Debt Service (CFADS) / Debt service (principal + interest) c. LLCR = NPV of CFADS over loan life / Debt service d. LLCR = NPV of CFADS over loan life / Debt balance	d	• LLCR = NPV of CFADS over loan life / Debt balance, hence (d) is correct • Option (a) is the definition for Project Life Coverage Ratio (PLCR) • Option (b) is the definition for Debt Service Coverage Ratio (DSCR) • Option (c) is not used in standard credit analysis

ii. Structured Questions

Questions	Answer
7) Explain the commercial principles of a PPP contract and provide three examples of areas for which commercial principles should be established prior to contract drafting.	The commercial principles of a project constitute at a high level the basis for its contractual terms. They are designed to reflect the preferred risk allocation designed for a given PPP project and therefore differ from project to project. The design of the commercial principles follows risk identification and allocation and precedes the drafting of the PPP contract. Key areas where commercial principles are normally established prior to contract drafting include: • Design • Construction and completion • Payment regime • Scope variation • Net financial impact • Intervening and changing events • Default and termination

<table>
<tr><th>Questions</th><th>Answer</th></tr>
<tr><td>8) Describe the three main categories of PPP payments and the key considerations in designing a PPP payment mechanism.</td><td>The three main categories of PPP payments are:
User payments: The private party directly charges fees to service users
Government payment: The private party receives payments from the government which may be tied to the availability of the asset or the quality of services provided (availability payments)
Mix of user and government payments: The revenues for the private party comprise fees from service users, supplemented by government payments (e.g., grants for construction, subsidies enabling lower service fees for low-income users)
The key considerations in designing a PPP payment mechanism are:
How the private party is incentivised to meet the availability and performance KPIs set by the government
How the payments match the intended outcomes for which the asset was developed and built
Whether the private party is incentivised to address, as soon as possible, the problems that cause failures to meet availability and performance standards
How the private party is incentivised to maximize efficiency to deliver best value for money over the contract period</td></tr>
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iii. Take-Home Assignment Question

Candidates will be provided with a Financial Model in Microsoft Excel format.

Instructions

The model will be a functional financial model comprising inputs, financial statements and other outputs, and a scenario manager.

Illustrative Tasks

1. You are required to create certain computations which are missing in the current Model. Feel free to make any additional assumptions that are necessary and insert new rows if required.
   a. Sculpt principal repayments of the senior facility to achieve target DSCR of 1.5x. Add required calculations in appropriate locations in the model and update the financial statements with proper links.
   b. Create a depreciation schedule using provided assumptions.
   c. Compute the Debt Service Cover Ratio (DSCR). State any assumptions.
2. There are ten errors in the revenue and operating expense modules and the balance sheet. Identify them and amend the erroneous computations.
3. Create charts in the Dashboard to present:
   a. DSCR and outstanding debt
   b. Funding mix profile
   c. Uses of funds
4. Create a new section on the "Dashboard" worksheet, titled "Ratios and covenants", and compute the following:
   a. Equity IRR
   b. Equity payback period
   c. DSCR and PLCR
   d. EBITDA margin, Net profit margin
5. Create two new scenarios with the following assumptions:
   a. Equity IRR is 10%;
   b. Revenue drops by 50%; and
   c. Capital expenses increase by 25%.