

#### INSTITUTE OF QUANTITY SURVEYORS SRI LANKA

# ASSESSMENT OF PROFESSIONAL COMPETENCE GUIDELINES AND INSTRUCTIONS TO CANDIDATES WITH APPLICATIONS AND FORMATS



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#### **SECTION 1 – GENERAL INTRODUCTION**

#### 1.1 APC Guide

This guide will help a candidate to prepare for the Assessment of Professional Competence (APC) of the Institute of Quantity Surveyors Sri Lanka (IQSSL). The successful completion of APC will enable a candidate to obtain Associate grade membership of IQSSL becoming a Chartered Quantity Surveyor. This guide shall be read in conjunction with the incorporation Act and Rules of IQSSL and is subject to change. This edition is dated September 2020.

#### 1.2 <u>Incorporation of IQSSL</u>

The Institute of Quantity Surveyors Sri Lanka is incorporated by the Parliament Act No.20 of 2007 (the Act).

#### 1.3 Rules of IQSSL

In accordance with Section 7 of the Act, Rules of IQSSL are adopted and published. Membership categories and other details are given in the said Rules and appendices thereto (the Rules).



#### **SECTION 2 – WHAT IS APC?**

#### 2.1 Overview of APC

APC is the process that leads to Associate grade membership of IQSSL. It is conducted by IQSSL periodically as convenient, in accordance with the Rules. Nevertheless, generally two sessions of APC are conducted each year during months of February and July, subject to approval of the Governing Council of IQSSL. APC sessions are conducted in the English language.

When a Registered grade member, Technical grade member or Graduate grade member of IQSSL or a corporate level full Member of an overseas professional institution in the field of Quantity Surveying recognised by IQSSL and having a reciprocity arrangement applies on the basis of such reciprocity for Associate grade membership of IQSSL, such applicant shall fulfil the applicable requirements stipulated for APC.

The objective of APC is to assess competence and suitability of a candidate to practice as an independent professional by becoming a Chartered Quantity Surveyor (Ch.QS).

APC may comprise of the following:

- A review of two years (or more as appropriately approved) professional experience
- A review of diary for practical experience and log
- Assessment of the Practice Problem Report and Presentation (as per instructions given with the practice problem)
- Assessment of the Critical Analysis Report and Presentation (as per the instructions given)
- An assessment through an interview by a panel appointed by IQSSL.

#### 2.2 <u>Membership routes and APC pathways</u>

Membership routes are fully described in the Appendix 2 of the Rules.

All categories of membership have a pathway to become an Associate grade member of IQSSL as described in the Appendix 2 of the Rules.

#### 2.3 <u>Commencement by Diary maintenance</u>

A candidate (except Member of an overseas professional Quantity Surveying institution recognized by IQSSL and having a reciprocity arrangement) who is willing to undergo APC



process must obtain the Diary for Recording of Practical Experience (the Diary) to commence APC process, by paying a prescribed fee.

It shall be maintained with daily recording of relevant work experiences with weekly and monthly summaries for the stipulated or such extended period, on continued and uninterrupted basis within course of Approved Employment (as defined at the Rules).

#### 2.4 Approach to APC

The Diary maintenance period is a structured training period during which a candidate's progress will be monitored by a Supervisor and it is primarily competency based. A candidate is expected to achieve satisfactory levels of skills in each specific competence area as stipulated by IQSSL.

A candidate shall not be able to apply for APC final assessment until the relevant Supervisor/s certify that such candidate has completed the minimum requirements.

During the final stage of APC a candidate must be able to demonstrate:

- that such candidate can represent appropriately and uphold the profession, IQSSL and the client
- possess adequate awareness on professional and commercial implications of work done
- capability to understand clients' and other stakeholders' objectives
- up to date knowledge on professional, legal, and technical matters relevant to local practise
- confidence and ability to work as an independent professional.

#### 2.5 Change of employment

If a candidate changes place of employment, after commencing but prior to completion of maintenance of the Diary, he/ she must inform such change to IQSSL immediately. Prior to ceasing such employment, a candidate must obtain confirmation of experience gained at such place of employment from the relevant Supervisor.

Subsequent place of employment/s shall be within definition of Approved Employment and shall be capable of providing a candidate with such APC structured training and be acceptable to IQSSL.

#### 2.6 Change of route to membership

During the Diary maintenance period a candidate may request a change to APC route. If such a change is approved by IQSSL the date of commencement for new route will be the date such request is approved by IQSSL.



#### 2.7 Registration for APC

Candidates who successfully complete the Diary maintenance and Members of overseas professional Quantity Surveying institutions recognized by IQSSL and having reciprocity agreements may register for APC by paying a prescribed fee.

To register and start APC process a candidate must:

- fulfil eligibility criteria to register for APC
- continue to be within course of Approved Employment for purposes of obtaining Associate grade membership.

The candidates shall provide all required material to IQSSL to enable determination of eligibility to register for APC. Once accepted for registration IQSSL will confirm such registration for APC process.



#### SECTION 3 – ACCOMPLISHMENT OF COMPETENCIES

#### 3.1 Competencies

Primarily a candidate shall gain practical experience within course of Approved Employment as described in the Rules of IQSSL, to be an eligible candidate at a session of APC. Competency requirements for APC are explained in detail at the Diary and also in a separate document available online on the web of IQSSL and as a hard copy at its office.

A candidate must achieve mandatory and core competencies at least to the required minimum level appropriate for a Chartered Quantity Surveyor.

There is no stipulated minimum requirement on number of training days for each respective competency. A candidate is required to gain required level of competence on each competency area during the overall period of training.

#### 3.2 Core Competencies

Core competencies are considered as the primary skills required by a Chartered Quantity Surveyor and the candidate is expected to possess an in-depth skill in core competencies.

#### 3.3 Mandatory Competencies

Mandatory competencies are related to personal, interpersonal, professional practise and business skills. It also includes knowledge on structure and role of IQSSL, information management, information technology, working in teams, conflict avoidance, negotiation, health and safety in construction, accounting principles and procedures and an up to date knowledge on new developments in the construction industry in general and particularly in Sri Lanka.



#### **SECTION 4 – APC PROCESS**

#### 4.1 Components of APC

Components of APC process are:

- a. Defined period of structured training/ professional experience within course of Approved Employment under an approved Supervisor (based on selected membership route)
- b. Maintenance of the Diary and logbook (based on selected membership route)
- c. Experience Report (based on the Candidate's chosen Membership Route)
- d. CPD records
- e. Practice Problem & Presentation
- f. Critical Analysis & Presentation
- a. Interview

#### 4.2 <u>Diary & log</u>

A candidate must maintain a daily record of tasks carried out and experience gained during defined period of structured training/ professional experience within course of Approved Employment under an approved Supervisor. This must be a true reflection of experience gained by a candidate and shall be used to complete the log. The candidate shall complete the log every month summarizing the entries in the Diary in the given format.

The mandatory competencies are an integral part of day to day experience and therefore, a candidate shall not record mandatory competencies in the Diary.

Candidate is responsible for duly completing the Diary & log for recording of practical experience with nominated Supervisor and submitting within appropriate time for inspection by IQSSL.

The Supervisor shall critically assess experience gained under his/ her supervision in relevance to required competencies monthly and confirm by signing the relevant pages of candidate's Diary for recording of practical experience and shall further review on similar basis periodically.

At each twelve-month period, a candidate's Diary shall be provided in duplicate to IQSSL for an interim inspection. This process shall be repeated for next two or three years as appropriate, or for such further extended period, as may be determined by IQSSL.



#### 4.3 Supervisor

Supervisor shall be the person to whom a candidate directly reports to within course of Approved Employment, on day to day basis, during entirety of defined period of structured training/ professional experience.

The Supervisor shall be a Chartered Quantity Surveyor, being a Corporate member of IQSSL or only in case of non-availability of such person, a corporate level full Member of an overseas professional institution in the field of Quantity Surveying recognised by IQSSL.

In case of non-availability of either of such categories of persons to be nominated as the Supervisor within course of Approved Employment, a candidate may nominate an external party who shall be a Chartered Quantity Surveyor, being a Corporate member of IQSSL or a corporate level full Member of an overseas professional institution in the field of Quantity Surveying recognised by IQSSL as the Supervisor. In such case, the candidate must demonstrate availability of opportunity for direct contact and be directly supervised by such nominated Supervisor on regular basis, as may be required by IQSSL.

It is the responsibility of each candidate to select appropriate Approved Employment, nominate a suitable Supervisor and to obtain due approval of IQSSL for such supervision prior to engaging in relevant supervised work within course of Approved Employment and maintenance of the Diary. IQSSL reserves the right to approve or disapprove of same, as appropriate.

Supervisor shall conduct monthly meetings, inspect and certify accuracy of relevant entries made by a candidate on pages of the Diary. Every three months, a further review shall be conducted by the Supervisor to analyse of Diary entries to ascertain accomplishment of required competencies by a candidate, and advise as appropriate.

This process shall be repeated for next two or three years as appropriate, or for such further extended period of time, as may be determined by IQSSL.

Any changes to above procedure are strictly discouraged and may be considered on non-binding basis, at the discretion of IQSSL.

Supervisor shall advise, guide and assist a candidate to obtain required competencies and a candidate shall have regular meetings with the Supervisor. Supervisor shall endeavour to elevate a candidate's status to be a Chartered Quantity Surveyor and guide accordingly.

For referred candidates who first appeared for an APC before 2017 a qualified person from an allied profession may be appointed as the Supervisor with prior approval of IQSSL, in which case a candidate shall report to and be guided by a Chartered Quantity Surveyor appointed by IQSSL as a Mentor.

#### 4.4 Experience Report

Each candidate shall submit a brief report on his/ her experience together with a self-assessment of relevant competencies in the forms issued by IQSSL.



#### 4.5 Continuing Professional Development (CPD) records

A candidate shall maintain a consolidated record of professional knowledge, understanding and skills enhanced throughout defined period of structured training/ professional experience with evidence of completing a minimum of 15 hrs. of approved CPD activities within 15 months immediately preceding the date of application out of which at least 10 hrs shall be from IQSSL conducted CPD activities. For candidates who apply on the basis of a valid reciprocity arrangement, such minimum component of IQSSL conducted CPD activities shall be 6 hrs.

#### 4.6 <u>Practice problem</u>

A practice problem will be given to be answered within a specified period.

It will generally be in the model of a hypothetical scenario involving many facets requiring professional judgement in many aspects. It is modelled to assess a candidate's knowledge, application of such knowledge and ability to arrive at reasoned professional judgements on many competency areas.

It shall be submitted in triplicate as a bounded document and will be given an opportunity to justify his/ her approach and reasoned professional opinion through an 8-minute presentation during the interview. It is an opportunity for a candidate to briefly explain his/ her approach to a problem, demonstrate good communication skills, ability to present necessary details within a given time and time management skills.

#### 4.7 <u>Critical analysis</u>

A candidate shall submit a Critical Analysis report with an appraisal of a practical issue he/she encountered during his/ her professional work, preferably within APC structured training period. It shall be a subjective writing reflecting on candidate's involvement in managing the defined practical issue and may include an initially incorrect approach, but critically reviewed in retrospect. It is an opportunity for a candidate to demonstrate his/ her ability in application of Quantity Surveying principles and/ or competencies in a real-life scenario. It shall contain not less than 2000 words and further details can be found in IQSSL document titled "Guidelines for Critical Analysis."

A candidate shall justify his/ her approach and reasoned opinion to such issue through a 4-minute presentation during the interview.

#### 4.8 <u>Assessment interview</u>

A candidate shall face a final assessment interview of one hour in person, on a date and time to be informed by IQSSL. The relevant panel of assessors will question a candidate, based on responses to the practice problem, presentation, report on experience and report on critical analysis of a real-life issue, to assess a candidate's competencies in relation to a



candidate's practice area, relevant core competencies, professionalism and knowledge and application of skills and ethical conduct necessary to be Chartered Quantity Surveyor.

During the process the panel will determine, among other matters, a candidate's ability to:

- clearly express himself/ herself
- defend answers provided/opinion expressed
- demonstrate knowledge gained and competencies accomplished
- demonstrate understanding role and responsibilities of a Chartered Quantity Surveyor
- apply knowledge gained, competencies accomplished and professional and technical skills, when rendering services
- work with professional independence as a Chartered Quantity Surveyor
- conduct oneself as a professional with dignity, integrity, civility and appropriate manners

The final assessment interview will comprise of following, among other matters:

- Interview panel's Chairperson's introductory note
- Self-introduction by the candidate
- Presentation of answers to the practice problem expected to conclude within 8 minutes
- Presentation of answers to the critical analysis expected to conclude within 4 minutes
- Questions on practice problem/ critical analysis/ presentation approximately 20 minutes
- Questions on experience record approximately 20 minutes
- Questions on professional ethics approximately 10 minutes
- Candidate's final note maximum of 2 minutes

Time for questions on practice problem, critical analysis, experience record and professional ethics may change at the discretion of panel Chairperson. Candidates will be provided with computers/ multimedia projectors will be provided; use of a candidate's own device is also allowed.

A candidate must be available at relevant assessment centre at least 15 minutes prior to scheduled commencement time of the assessment interview. The dress code is formal.

#### 4.9 <u>Assessment panel</u>

The panel conducting a candidate's APC assessment interview will consist of three members, with a Chairperson and two other assessors appointed by IQSSL. Each panel will be constituted, broadly and as practically as can be, to represent contractor's practice, consultant's practice and academia in Quantity Surveying. They will be selected from a list of assessors maintained by IQSSL. Each assessor will be a practising professional or an academic in the field of Quantity Surveying of good standing and repute. Chairperson shall be at least a Fellow grade member of IQSSL.



To be an assessor of an assessment panel conducting an interview in the APC process, a person must be at least an Associate arade member of IQSSL with:

- 1. Not less than 5 years of post-qualifying experience as a Chartered Quantity Surveyor
- 2. Not less than 10 years of technical and/ or academic experience
- 3. Prior experience being an observer of previous APC sessions
- 4. Participation at a relevant assessor training workshop conducted by IQSSL

No nominated Supervisor of a candidate will be appointed to the relevant panel of such candidate. Each list of assessors may be reviewed by IQSSL biannually. IQSSL may at its discretion remove any person from a list of assessors for any unsuitability or inappropriate conduct.

Assessors shall not inform or make comments on a candidate's performance during or after an APC session to a candidate or any other person and shall not divulge any information with regard to a particular APC session.

No candidate shall at any time prior or after conducting of an APC session or issuing of results of such session contact any member of panel of assessors of any such APC session, in respect of his/ her performance. Such conduct will be considered inappropriate and may incur immediate annulment of result of such candidate and/ or prohibition on participation at any future APC session for a determined period.



#### SECTION 5 – ASSESSMENT PROCESS. RESULTS AND REFERRALS

#### 5.1 Assessment process

Assessors will give marks based on guide lines provided and then conduct a qualitative overall assessment as a panel. Appropriate forms are issued to assessors for marking and assessment.

#### 5.2 Results

Results will be issued only after ratification by the Governing Council of IQSSL and shall be considered as final and conclusive for all purposes.

A candidate shall obtain an average of fifty (50) or more marks from assessment of such components of APC procedure as practice problem, presentation, critical analysis of an issue and interview. A successful candidate will be eligible to become an Associate grade member of IQSSL upon payment of relevant prescribed fees and will be entitled practise as a Chartered Quantity Surveyor.

If a candidate fails from the practice problem and presentation, such candidate is considered as having failed the entire APC procedure and may repeat any number of times.

If a candidate is unsuccessful only at the critical analysis of an issue or interview components, such a candidate is considered as being referred and may repeat the unsuccessful component within the very next APC.

If a candidate is considered as referred, he/ she may be provided with a referral note on considered weaknesses or expected areas for improvement. Such referral notes may be issued by a relevant panel Chairperson to IQSSL and may be confidentially disclosed wholly or in part only to the relevant candidate at the discretion of IQSSL.

#### 5.3 Referred candidates

In order to be eligible for re-assessment at immediately next session of APC, a candidate provided with a referral shall:

- In consultation with the Supervisor identify a suitable mechanism to address relevant deficiencies indicated
- Submit a report to IQSSL on how such deficiencies have been addressed
- If the candidate failed from the practice problem and presentation only, he/ she shall answer the practice problem that will be issued by the IQSSL.



#### **SECTION 6 – OTHER INFORMATION**

#### 6.1 APC help

APC is a process that determines accession to professional category and requires a lot of commitment. The responsibility for successfully completing APC process rests solely with a candidate. Candidates are encouraged to attend APC Preparation Classes, commonly called the Charter Classes, that may be conducted by IQSSL depending on demand.

#### 6.2 Contact information

Postal Address - Institute of Quantity Surveyors Sri Lanka,

The Organisation of Professional Associations of Sri Lanka,

The Professional Centre.

2<sup>nd</sup> Floor, No. 275/75, Professor Stanley Wijesundara Mawatha,

Colombo 07.

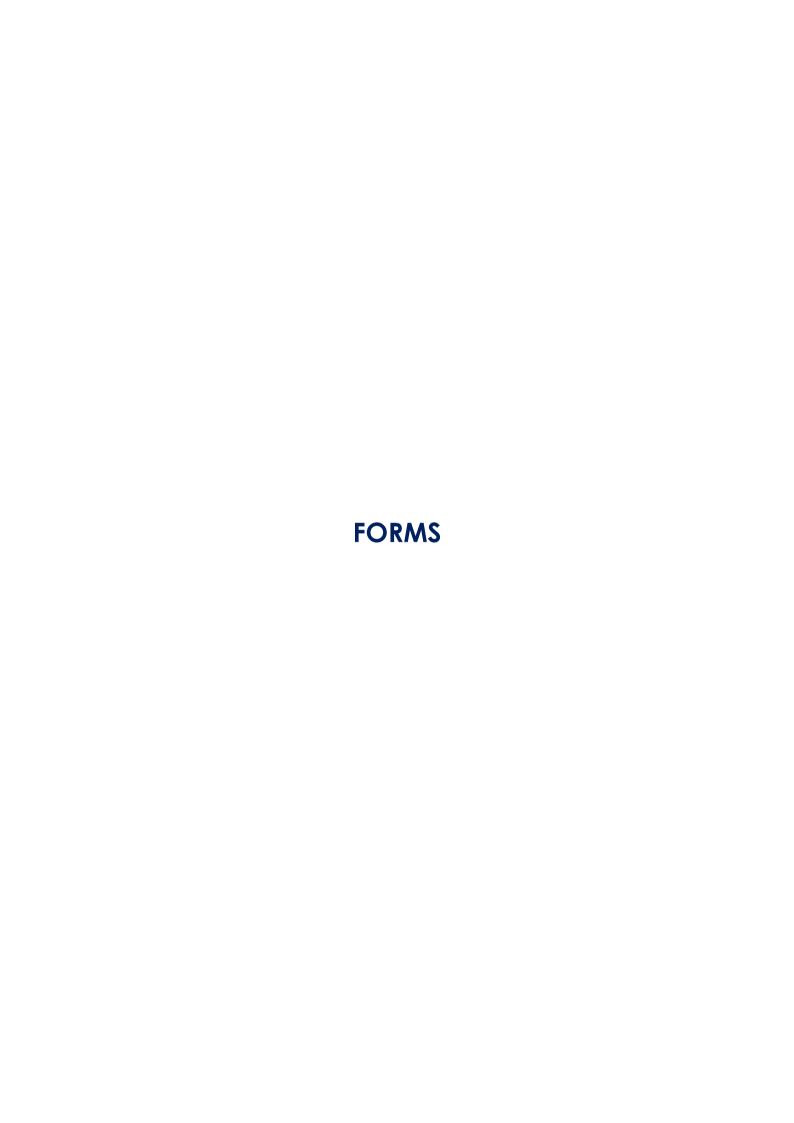
Telephone – 011 2595570

Fax - 011 2595570

Email – igssi@slt.lk

Website – <u>www.iqssl.lk</u>

The candidates are required to make sure that up to date email addresses and postal address are provided to IQSSL.



To: The Hony. Secretary,
Institute of Quantity Surveyors Sri Lanka,
The Professional Centre, No. 275/75, 2nd Floor,
Prof. Stanley Wijesundara Mawatha,
off Bauddhaloka Mawatha,
Colombo 07



## APPLICATION FOR ASSESSMENT OF PROFESSIONAL COMPETENCE

1	NAME (IN FULL)				
2	POSTAL ADDRESS				
3	Contact Details	Tel:	Fax		Email:
4	Membership Category	Graduate		Registered/ Technical	
5	Date of Present Member	ship:			
6	A.P.C Diary/ Log	I have submitted the above I have not submitted the above		nding same herewith	
7	PARTICULARS OF SUPI	ERVISOR			
		Name: Membership Number			
8	A.P.C TEST FEE				
		I am enclosing herewith a conformer for the A.P.C cover.	heque No	for Rs. 5,0	000.00 being the fee
		I will call over at the Institute	e office at above addres	s to collect the A.P.C	papers.
	Signature: Name: Date:				
	*delete if in applicable				

### FORM 1 – ASSESSMENT OF PROFESSIONAL COMPETENCE



Date: .....

Office Use Only

Hony. Secretary,

Signature & Seal: .....

To:

**Submission of Diary and Log Book by the Candidate** 

Institute of Quantity Surveyors Sri Lanka, Verification of Payments The Professional Centre, No. 275/75 2nd Floor, Prof. Stanley Wijesundara Mawatha. Colombo 07. Candidate's Name: Membership No.: APC route: Month and Year of APC: Period of Diary: Supervisor's Name: Supervisor's IQSSL Mem. No. Mentor's Name: Mentor's IQSSL Mem. No.: Candidate's Signature : ..... Supervisor's / Mentor's Declaration I confirm that the entries made by the candidate in this Diary and Log Book are true and accurate to best of my knowledge and it provides records of works attended/ training undergone by the candidate during the specified period of .....

# FORM 2 – ASSESSMENT OF PROFESSIONAL COMPETENCE



# **Statement of Self Assessment of Competencies**

Candidate's Name	:	
Membership No.	:	
APC Route	:	
Month and Year of APC	:	
COMPETENCY AREA AND TAI ACHIEVEMENT	RGETED	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
AREA 1 – COST MANAGEMENT		
<ul> <li>1.1 Provide cost advice at prestage and provide input development of project brief.</li> <li>Understanding the needs of feasibility as a 1<sup>st</sup> priority project.</li> <li>Understanding how to feasibility studies and projection.</li> <li>Understanding and reasoning the internal factors (Laspecifications and time) and factors (Market forces, preseconomic environment and requirements) and constrainfluence the realization project.</li> </ul>	to the doing of of the prepare financial g behind ocations, external olitical & statutory sins that	

- 1.2 Advise on cost and benefits of construction projects and prepare cost benefit analysis.
- Interpreting cost figures in relation to the benefits and its significances.
- Understanding the cost and pricing structure of the project.
- Understanding and application of appropriate cost savings on various options.
- Advising the client on the best option available.
- Understanding the application of value Engineering.
- Understanding life cycle costing exercise and advising on its significances.
- Understanding Cost benefit analyze
- 1.3 Collection of cost data, cost analysis, establishing data, storing system and implement updating procedure.
- Understanding the definition of cost data and importance of cost data.
- Compiling and analyzing cost data and use them with the correct application to arrive at a reasonable budget.
- Involving cost analysis and its application.
- Establishing data storing system.
- Establishing system for updating data.

- 1.4 Establish objectives and parameters of cost planning, prepare and analyze required inputs and prepare cost plans.
- Understanding the objectives and the cost limits within the defined parameters.
- Establishing the various stages of cost planning.
- Making the adjustment that may be required to suit the client's budget.
- Analyzing to understand the behaviour of the construction market and its application in preparation of the cost plan.
- 1.5 Provide advice to Clients on estimate, cost alternatives and cost plan.
- Taking part in design evaluation.
- Taking part in cost controlling of projects during the design development stage and construction stage and advising.
- Identifying alternative methods/ materials and to keep possible cost overrun as much as minimum.
- Advising on spending of provisional sums and contingencies.
- Advising on adjustment or revisions required for cost control systems.
- Producing estimate and cost plan.

# COMPETENCY AREA AND TARGETED LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT) **ACHIEVEMENT** 1.6 Prepare development budget for the project, coordinate client's cash flow and advice on financing of the project. • Studying loan agreements and lease agreements and advising to client on the matters related to cost of the project. Collecting pricing data related to development. • Predicting cash flows, construction cost and contingencies. Advising on the cash flow by analyzing the budget and evaluate the consequences. Assisting to client in financial control. • Reporting and forecasting of cost during construction stage. • Having an insight in to factors affecting the cost. · Reviewing interim valuation for draw downs. Analyzing the risks involved in the project. AREA 2 – **COST ESTIMATION** 2.1 Cost data collection, storing and establish updating system required for estimation. Searching for sources of cost data. Preparing cost reports and advising the client in well in advance on any

drastic revision to cash flow and the

budget.

- Using collected data for estimating purpose of the project without going in to detail computation.
- 2.2 Preparation of procedure for estimation and preparation of estimates.
- Identifying and apply of the appropriate costing method to a range of situations.
- Preparing and presenting reports regarding the cost and time.
- Formulating a unified system for estimating purpose and application of it to suit to the type of construction and the different circumstances.
- 2.3 Advice on tendering including critical evaluation of various documents included in the tender.
- Checking and advising whether the following requirements have been met;
  - 1. Use of correct type and correct form of contract.
  - Accuracy and the completeness of the drawings and specifications.
  - Accuracy and the completeness of BOQs.
  - 4. Adequacy of the specified tender period and construction period.
  - 5. Relevant special conditions of contract and specifications.
  - 6. Specimens for bonds and guarantees.
  - 7. Other factors influencing making decision to tender.

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
8. Other factors affecting to the	
tender sum.	
Understanding how important the	
avoiding inconsistencies in the	
documents during the preparation of	
tender documents.	
2.4 Assist and advice on accuracy of cost	
estimate and cost audit reporting.	
Checking and satisfying the client at	
the final stage of the construction on	
the final cost.	
2.5 Establish estimate review system and	
conduct reviews on estimates.	
<ul> <li>Identifying and apply of the</li> </ul>	
appropriate review system to a range	
of situations.	
Preparing and present reports	
regarding the cost, time and the	
quality.	
<ul> <li>Identifying the reasons behind for the difference in the actual cost and</li> </ul>	
estimated cost of a project.	
<ul> <li>Using risk and value management</li> </ul>	
techniques.	
·	
AREA 3 –	
CONTRACT ADMINISTRATION	
3.1 Interim valuation.	
Agreeing on the valuation procedure.	
Agreeing on distribution of preliminary	
bill.	

Identifying payments headings to be included in the valuation and agree

on format of the valuation.

- Identifying clauses in the contract related to the valuation.
- Formulating method of claiming for provisional sum items/ prime cost rate.
- Issuing of payment certificates.
- Advising on recoveries and taxes.
- Advising on delay damages as per contract.
- Reviewing interim valuation and the understanding the circumstance under which it is needed.
- Administration of release of retention
- 3.2 Prepare progressive financial reporting during construction phase and monitoring.
- Collecting data.
- Preparing reports on the financial progress against the works completed and the payment received against the actual cost incurred at given time and cost to complete.
- Using cash flow.
- Using "S" curve and understanding the circumstances under which "S" curve is liable to take different path.
- Advising on remedial measures if required.
- Identifying the reasons and assess direct and indirect cost which have not accounted for the project during construction.
- Carrying out routine and short term exercise to monitor the financial progress.

- Advising on cash flow, profitability and financial implication together with remedial actions.
- 3.3. Variation process up to finalization of variation accounts.
- Initiating variation, Valuation of variation, submitting variation account, negotiating and obtaining approval.
- Analyzing effect on the programme and consequential cost due to variation.
- 3.4 Initiation of contractual correspondence and interpretation of contract.
- Preparing and present the correspondence in accordance with the contract conditions.
- Interpreting the clauses in the contract correctly.
- Avoiding/ handling the issues leading to disputes.
- Preparing correspondence setting out logical arguments and present clear recommendation.
- 3.5 Data collection, prepare contractual cost and time related claims, negotiation and finalization.
- Collecting data.
- Informing the intention to claim.
- Formulating methods of conflict management and resolving disputes such as negotiation, mediation, adjudication and arbitration.

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
<ul> <li>Understanding application of case laws and disputes resolution.</li> <li>Understanding role of quantity surveyor in disputes resolution.</li> <li>Preparing claims. (time and cost)</li> </ul>	
<ul> <li>Understanding requirements to meet as per conditions of contract prior to submission and evaluation of claims.</li> <li>Understanding claim evaluation, negotiations and recommendation.</li> <li>Dealing with dispute resolutions under the different forms of contract such as ICTAD and FIDIC and legal and statutory requirements.</li> <li>Evaluating claims (time and cost) and recommendation.</li> </ul>	
<ul> <li>3.6 Prepare project implementation and procurement plan.</li> <li>Reviewing development proposals.</li> <li>Advising on the procurement method and contract documentation.</li> <li>Agreeing on programmes and pre contract and post contract works.</li> <li>Advising on risks involve.</li> <li>Managing delays.</li> <li>Understanding the individual</li> </ul>	
responsibility and the collective responsibility in the project team.	
3.7 Final accounts and reporting	

• Agreeing on the final account

• Ensuring all payment entitlement are

procedure.

included.

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
<ul> <li>Formulating a check list for final account procedure.</li> <li>Ensuring all deductions and recoveries have been considered.</li> <li>Ensuring all requirements regarding completion, handing over and submission of relevant documentation</li> </ul>	
<ul> <li>are met.</li> <li>Advising on delay damages as per contract.</li> <li>Reviewing final account.</li> <li>Issuing final certificate.</li> </ul>	
<ul> <li>3.8 Advice on contractual and extra contractual claims.</li> <li>Collecting data and information.</li> <li>Initiating claims</li> <li>Sending notice of claim.</li> <li>Preparing claims.</li> <li>Understanding requirements to meet as per conditions of contract prior to submission and evaluation of claims.</li> <li>Understanding claim evaluation, negotiations and recommendation.</li> <li>Understanding the process of settlement of disputes.</li> </ul>	
AREA 4 – COST REPORTING  4.1 Establish cost monitoring procedure including contractor's budget and analysis of pricing for cost value reconciliation and interpretation.  • Understanding the contractor's budget and client's budget and the differences.	

- Understanding the relationship between the contractor's inflow and outflow of cash and the budgeted figure.
- Understanding the relationship between the client's outflow of cash and the budgeted figure.
- 4.2 Turnover, profit and lost forecasting cash flow forecasting and coordinate with client's/ contractor's cash flow.
- Understanding the relationship between contractor's profit and loss and the budget items and underline the events which influence them.
- Understanding the relationship between client's outflow cash and the budget items and underline the events which influence them.
- Understanding the financial statement, balance sheets, profit and lost account and their use.
- Obtaining a general idea in the organization performance and the factors that influence it.
- Interpreting the figures and variance and conveying its significance to the top management.
- 4.3 Control and management of sub contract accounts.
- Carrying out routine checks on sub contractor's payment and the main contractor's profits.

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT
Ensuring there will be no negative cash flow on sub contractor's work.	
4.4 Advice on procurement or resource including materials, labour and plants.	
<ul> <li>Understanding of the following;</li> <li>Quantification of materials and assessing requirement of resources.</li> </ul>	
Finding sources (Internal and external).	
3. Quality assessment.	
4. Output assessment.	
<ol><li>Awareness of market prices and the adequacy of supply.</li></ol>	
Depreciation and costing of plant and machineries.	
4.5 Preparation of insurance claims,	
presentation, negotiation and finalization.	
<ul> <li>Understanding or awareness of the following;</li> </ul>	
Contractor's all risk.	
Minimum amounts to be covered number of occurrence, limitation and escape clauses.	
Construction insurance and professional indemnity insurance.	
Relevant contract clauses.	
Work areas covered under the contract.	
6. Exclusions and the deductibles.	

Cross liability.
 Compiling data.
 Notification

of damage.

of

occurrence and the assessment

damage

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
10. Submission of claim.	
11. Negotiate and finalize the claim.	
12. Fire insurance of existing	
buildings and calculation of	
reinstatement cost.	
13. Transfer of risk.	
4.6 Resource analysis and management	
including resource usage, productivity	
reports, interpretation and	
reconciliation.	
Working / coordinating with the respective	
division (Human resource, plant and	
stores) in respect of the following;	
Compiling resources.	
Guide for use of resources.	
Adequacy of resources.	
Idling of resources.	
Maximum utilization of resources.	
Economical use of resources.	
Advise on replacement and disposal	
of resources.	
AREA 5 – PROCUREMENT ADVICE	
5.1 General advise on tender process	
considering constructability, delivery	
systems and time limitations.	
Understanding of different types on	
procurement system.	
Using different procurement system	
such as traditional, design and build,	
management form, BOT, BOOT,	
serial tendering or contracting and	
other types.	

- Advising client on the procurement system suit to the situation.
- Advising the client on the standard Form of Contract to be used.
- Understanding of standards, guidelines, procedures commonly used in public sector works and private sector works.
- Identifying the particular conditions / special conditions applicable to the project and incorporating them in the tender document.
- Having an insight in to the factors which influence the effectiveness of the type of the procurement system selected.
- 5.2 Initiate, prepare documents, evaluation criteria and evaluation of pre-qualification process.
- Making decision on the various documents required to be included in the tender document and the format to be used.
- Deciding as how to prepare / compile those documents.
- Preparing criteria for pre-qualification and the evaluation of tenders.
- Preparing programme and personal allocation for the job.
- Preparing special conditions / particular conditions applicable for the project.

- 5.3 Recommendation and agree on all inputs required for preparation of Bills of Quantities
- Preparation of programme and action plan to finalize the Bills of Quantities.
- Pricing Bills of Quantities for evaluation purpose.
- 5.4 Prepare Bills of Quantities, undertake checking required and prepare necessary addenda.
- Understanding and awareness of different type of method of measurement and their application.
- Selection of appropriate method of measurement.
- Checking the Bills of Quantities in order to minimize the errors and mistakes prior to issue for tendering.
- Preparing addenda when necessary and see that they can be included in the tender without having much difficulties and confusions.
- Using standard phraseology and the words commonly used in the construction.
- 5.5 Preparation of tender documents including compilation and tender action.
- Understanding what constitutes a tender document and addenda.
- Understanding as how to fix delay damages and the limit.
- Preparing and producing documents in line with the standards, guidelines, procedures commonly used in public

### LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)

sector works and private sector works for pre-qualification, documentation and invitation to tender up to the selection of the contractor.

- Understanding e-tendering.
- Understanding factors that are to be considered in drafting special conditions / particular conditions.
- 5.6 Tender evaluation, negotiation and award.
- Using priced BOQs.
- Understanding guidelines specified by the Government Procurement Authority for evaluation in respect of public sector works.
- Understanding the evaluation criteria agreed previously for evaluation in respect of private sector works.
- Preparing tender reports.
- Negotiating on the additional conditions stipulated if any by the tenderers and agree on them and the adjustment if required.
- Entering to negotiate process such as single and two stage tendering.
- Preparing of Memorandum of Understanding and Letter of Acceptance.

#### 5.7 Specification writing

- Understanding and interpretation of the following;
  - 1. Need of specification.
  - Specification notes and construction procedure from the Architects and Engineers.

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
3. Use of standards specification/	
codes and regulations available	
(Nationally and internationally)	
and prepare particular	
specification. 4. Avoiding discrepancies.	
5. Relating and making reference to	
drawings.	
6. Use of standard phraseology.	
Preparation of nominated sub contract.	
Understanding and interpretation of	
the following;	
4 5 6 111	
1. Definition of nominated sub	
contract.	
2. Relationship between contractor,	
nominated sub contractor and the	
employer.	
3. Definition of attendance and	
profit.	
Standard form of nominated sub	
Standard form of nominated sub contract.	
5. Appointment of nominated sub	
contractor.	
6. Administration of nominated sub	
contractor.	

# **COMPETENCY AREA AND TARGETED** LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT) **ACHIEVEMENT** AREA 6 CONSTRUCTION TECHNOLOGY AND **BUILDING SERVICES** 6.1 Acquire knowledge of construction technologies, building process, materials, and its suitability to the project climate. Understanding of the following; Building construction. 1. Civil engineering works such as roads and bridges, water supply, irrigation, power plant, sea ports and air ports. 2. Stages of work from the inception to completion. 3. Applicable laws and regulations to construction. 4. Planning and sequence construction activities. 5. Works within and outside of the construction site. 6. Importance of planning building services simultaneously with the building design. 7. Materials used for construction. 8. Substitute materials. 9. Methods of construction. 10. Temporary works. 11. Definition of High rise and low rise buildings. 12. Basement constructions. 13. Problems encountered in construction.

6.2 Acquire knowledge of the principals of

construction.

the design and the science of

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
<ul> <li>Knowledge on standards and code of practice.</li> <li>Applying them for different type of construction and to achieve economical cost solution.</li> <li>Knowledge on design stages</li> <li>6.3 Acquire knowledge of the principals of construction.</li> <li>Resolving problems encountered in construction.</li> <li>Giving economical cost solution.</li> </ul>	
<ul> <li>6.4 Interpretation of drawings, specification and other documents.</li> <li>Understanding the following;</li> <li>1. Standard sizes of drawings and scales.</li> <li>2. Use of reference drawings.</li> <li>3. Difference between preliminary drawings, tender drawings and construction drawings.</li> <li>Interrelating drawings, specification and other documents.</li> </ul>	
AREA 7 – SPECIALIZED AREAS	
<ul> <li>7.1 Financial auditing of construction projects.</li> <li>Collecting and sorting of data and figures.</li> <li>Interpreting data and figures / variance and convey their significance to client.</li> </ul>	

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
<ul> <li>Understanding the reasons for loss or failure of the project and underline the events which influence.</li> <li>Having an insight in to the project performance and to the factors which influence for the successful or failure of the project.</li> <li>Recommending precautionary measures to be taken to avoid bad performance or to improve performance on other projects and future projects.</li> </ul>	
<ol> <li>7.2 Feasibility studies.</li> <li>Understanding the following;</li> <li>Purpose of feasibility studies and process of preparation of feasibility studies.</li> <li>Elements included in feasibility studies.</li> <li>Applicable laws and regulations which have the impact on the feasibility studies.</li> <li>Other criterion such as value engineering and life cycle cost used in the feasibility studies.</li> <li>How the elements included in the feasibility studies other than the construction cost can be obtained.</li> </ol>	
<ul> <li>7.3 Life cycle cost analysis.</li> <li>Understanding up to what extent the Life cycle cost analysis is applied to the feasibility studies and its importance.</li> </ul>	

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
<ul> <li>7.4 Provide value management services.</li> <li>Understanding up to what extent the value management services is applied to the feasibility studies and its importance.</li> </ul>	
<ul> <li>7.5 Use of computer application relevant to quantity surveying services.</li> <li>Using appropriate software products to assist day to day works.</li> <li>Understanding that software available within the organization and when it is appropriate to use them.</li> <li>Understanding what extent the savings can be achieved on cost and time within the organization.</li> </ul>	
<ul> <li>7.6 Risk management.</li> <li>Understanding the principals of risk management.</li> <li>Understanding how to identify the risk and the party who is at risk.</li> <li>Quantifying and valuing the risk.</li> <li>Understanding how to minimize the risk.</li> <li>Understanding up to what extent and the circumstances the risk management is used and applied during pre contract process and post contract process.</li> </ul>	

COMPETENCY AREA AND TARGETED ACHIEVEMENT	LEVEL ACHIEVED BY THE CANDIDATE (SELF ASSESSMENT)
7.8 Acquire knowledge on regulations and	
guidelines related to construction in	
relation to government and local	
authorities, statutory bodies and	
donor funded projects	
Assisting with the preparation of	
financial and regulatory reports in	
accordance with the statutory	
requirements.	
Understanding the implication to the	
project particularly to the cost by such	
legislations and regulations.	
Understanding of the purpose and	
reasoning behind such legislations	
and regulations.	
Having an insight in to purpose and	
reasoning behind such regulations	
and guidelines.	
AREA 8 –	
OTHER AREAS / ACADEMIC	
ACTIVITIES	
8.1 List down any specialist area	
research, studies or academic activities or	
other experience not covered by the	
above areas.	
Making substantial contribution	
towards the development and the	
academic excellence of the quantity	
surveying profession in general.	
Making substantial contribution	
towards the development of the	
construction industry with special	
reference to quantity surveying.	

#### Candidate's Declaration.

I confirm that the above records are true and accurate and it gives to competencies according to my assessment during the works / training per	·
It is understood and agreed that the information submitted above is to understanding, according to its sole judgment and discretion, the levels the said specified period. It is also understood that the decision of the levels is final and not subject to appeal of any kind.	of competencies I have achieved during
I understand that failure to complete the forms and furnish the above demy application.	tails adequately may result in rejection of
Signature:	Date:

#### FORM 3 – ASSESSMENT OF PROFESSIONAL COMPETENCE



# **Professional Development**

Total Number of Hours of CPD Programmes :		
No. of Attended CPD Programmes with proof	of attendance/ participation : Attached	Not attached
Month and Year of APC	<b>:</b>	
APC Route	:	
Membership No.	:	
Candidate's Name	1	

Professional Development Programme attended and the Conducting Organization	Resource Persons and Qualifications	Number of Hours	Relevant Competency Area and the Brief Report by the Candidate

(Adopt the format of above chart, as necessary, without the need to repeat initial details provided above the chart).

#### **Candidate's Declaration**

I confirm that above records are true and accurate and it gives the record of C	CPD programmes attended to by me during the specified period of
I understand and agree that information submitted above is to be used by the Cou	uncil of the Institute to determine, at its sole judgment and discretion
levels of competencies I have accomplished during the said specified period. I under	erstand and agree that the decision of the Council, with respect to my
competency levels is final and conclusive and shall not be subjected to review or an	appeal of any kind.
I understand that failure to complete relevant forms and/ or furnish above details as	appropriate may result in rejection of my application.
Signature:	Date:

#### FORM 4 – ASSESSMENT OF PROFESSIONAL COMPETENCE

# **Summary of Experience**



SRI	ı	Δ	N,	KP

Candidate's Name	:
Membership No.	:
APC Route	·
Month and Year of APC	<b>:</b>

# 1.0 Employment Record since becoming Graduate member / Technical member / Registered member of the Institute

Employer	Nature of Organization (Consultancy / Contracting / Others	Position Held	Period

# 2.0 Experience Record

EMPLOYER	AREA 1 – COST MANAGEMENT

EMPLOYER	AREA 2 – COST ESTIMATION

EMPLOYER	AREA 3 – CONTRACT ADMINISTRATION

EMPLOYER	AREA 4 – COST REPORTING

EMPLOYER	AREA 5 – PROCUREMENT ADVICE

EMPLOYER	AREA 6 – CONSTRUCTION TECHNOLOGY AND BUILDING SERVICES

EMPLOYER	AREA 7 – SPECIALIZED AREAS

EMPLOYER	AREA 8 – OTHER AREAS / ACADEMIC ACTIVITIES

3.0 Concluding Remarks.

#### 4.0 Candidate's Declaration.

I confirm that above records are true and accurate and it gives the record of	works attended to by me during the specified period of
•	the Council of the Institute to determine, at its sole judgment and discretion, od. I understand and agree that the decision of the Council, with respect to my ew or an appeal of any kind.
I understand that failure to complete relevant forms and/ or furnish above de	etails as appropriate may result in rejection of my application.
Signature:	Date:

## FORM 5 – ASSESSMENT OF PROFESSIONAL COMPETENCE



# **Submission of Answer to the Practice Problem**

To:	Hony. Secretary,	Office Use Only
	Institute of Quantity Surveyors Sri Lanka,	
	The Professional Centre, No. 275/75, 2nd Floor,	
	Prof. Stanley Wijesundara Mawatha,	
	Colombo 07.	
Cand	idate's Name :	
Cand	idate's name :	
Memb	pership No. :	
APC I	route :	
Montl	n and Year of APC:	
Cand	idate's Declaration.	
	irm that the enclosed answer to the Practice Probl	
sketcr	nes, calculations, assumptions, additional notes etc, a	are my own work.
Lunda	erstand and agree that the contents of this submission	on will be used by the Council of the
	ite to determine, at its sole judgment and discret	•
	ation of quantity surveying principles by me. I under	<u> </u>
	ouncil, with regard to my answer to the Practical Prol	•
	e subjected to review or an appeal of any kind.	ordina and condusive and shall
.100 00	outly wild.	
Signa	ture:	Date:

## FORM 6 – ASSESSMENT OF PROFESSIONAL COMPETENCE



# **Submission of Critical Analysis**

To:	Hony. Secretary,	Office Use Only
	Institute of Quantity Surveyors Sri Lanka, The Professional Centre, No. 275/75, 2 <sup>nd</sup> Floor, Prof. Stanley Wijesundara Mawatha, Colombo 07.	
Cand	idate's Name :	
Memb	pership No. :	
APC ı	route :	
Monti	h and Year of APC:	
Cand	idate's Declaration.	
	firm that the enclosed critical analysis and atta ations, assumptions, additional notes etc, are my ow	
Institu applic the Co	erstand and agree that the contents of this submission to determine, at its sole judgment and discrestation of quantity surveying principles by me. I undefouncil, with regard to my critical analysis is final and iew or an appeal of any kind.	tion, knowledge, understanding and rstand and agree that the decision of
Signa	ture:	Date:



# INSTITUTE OF QUANTITY SURVEYORS SRI LANKA

# ASSESSMENT OF PROFESSIONAL COMPETENCE (APC) GUIDELINE FOR CRITICAL ANALYSIS

#### 1.0 **Pre-Assessment Submissions for APC**

- 1.1 APC consists of Pre-Assessment submissions and viva voce. Pre-Assessment submissions comprise of two key components, i.e, Section A – Critical Analysis and Section B – Answer to the Practice Problem. In addition to the said two key submissions Candidate's experience and competency levels shall be submitted in the form and manner specified by the IQSSL as a part of APC process.
- 1.2 This guideline stipulates what is a "Critical Analysis", it's format and how to select a subject issue/ issues for critical analysis.
- 1.3 Answers to the Practice Problem should be submitted in compliance with the guidelines provided with the Practice Problem.

#### 2.0 **Critical Analysis**

- 2.1 Critical Analysis is a subjective writing reflecting candidate's involvement in managing a practical issue during their professional career. This provides an opportunity for the Candidates to demonstrate their ability in applying Quantity Surveying Competencies in day to day QS practice.
- 2.2 This includes identifying an issue or problem, analyzing it in the context of the contract and other pertaining parameters, propose possible solutions and analyze there suitability, justify the recommendation, critically appraise (both positive and negative) your recommendation and reflective analysis of the lessons learned or experience gained with your involvement. Candidate should make sure to give firm justifications instead conditional statements.

- 2.3 Critical analysis should <u>not</u> be a narrative with lots of project information and little input of the Candidate. This exercise is to prove that the candidate has all the competencies necessary to practice as a Chartered Quantity Surveyor. The Critical Analysis must be an issue of the Candidate's own experience.
- 2.4 The word count of the Critical Analysis is **2000 words** (excluding declaration) and to be submitted in triplicate. Font type should be Arial with size 12.

#### 3.0 How to select an issue/ issues

- 3.1 In selecting an issue/ issues the size, type and complexity of the project are immaterial, but the Candidate's involvement is highly required. Evidence of the Candidate's involvement (ability in applying knowledge and handling the issue competently) must be reflected through the selected issue/s. The Candidate can select maximum two (2) issues for the submission and may not be from the same project. Select an issue/s with a genuine challenge of resolving with thorough involvement/ use of QS competencies.
- 3.2 The Candidate must make sure to obtain the Employer's permission when exposing sensitive information of project or else not to declare such sensitive information.

#### 4.0 Format of Critical Analysis

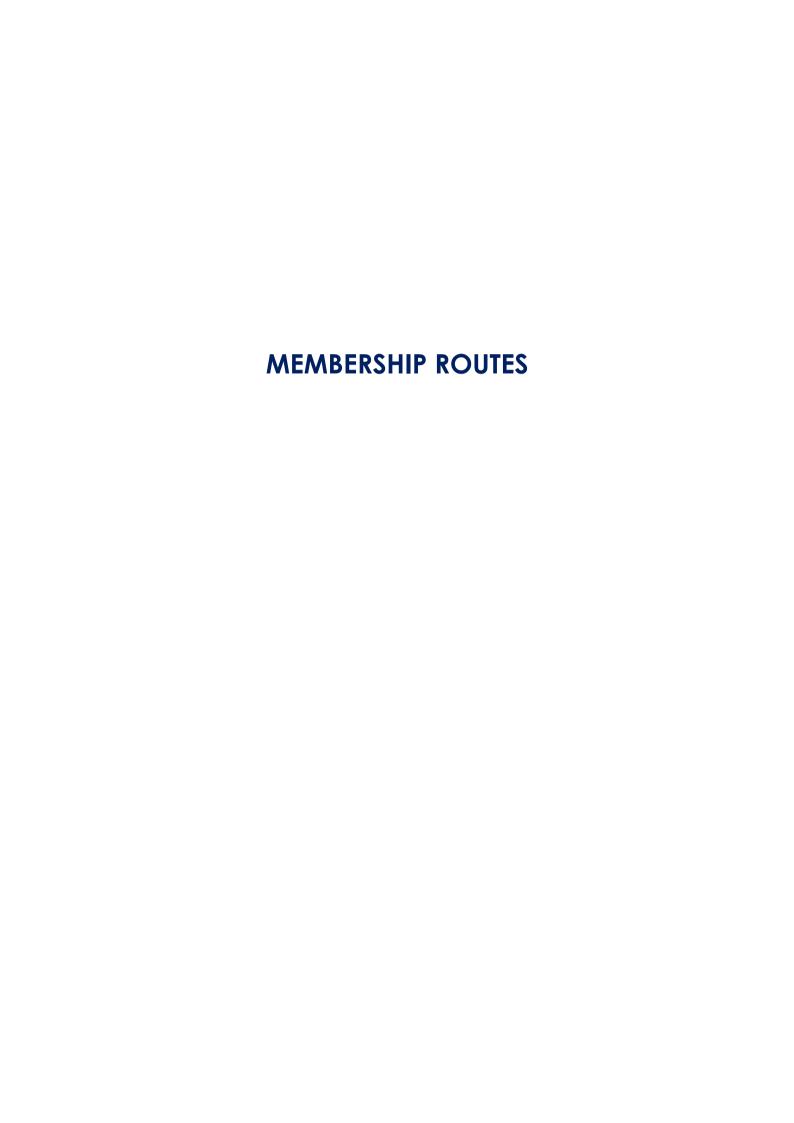
4.1 Contents of the Critical Analysis should be as follows.

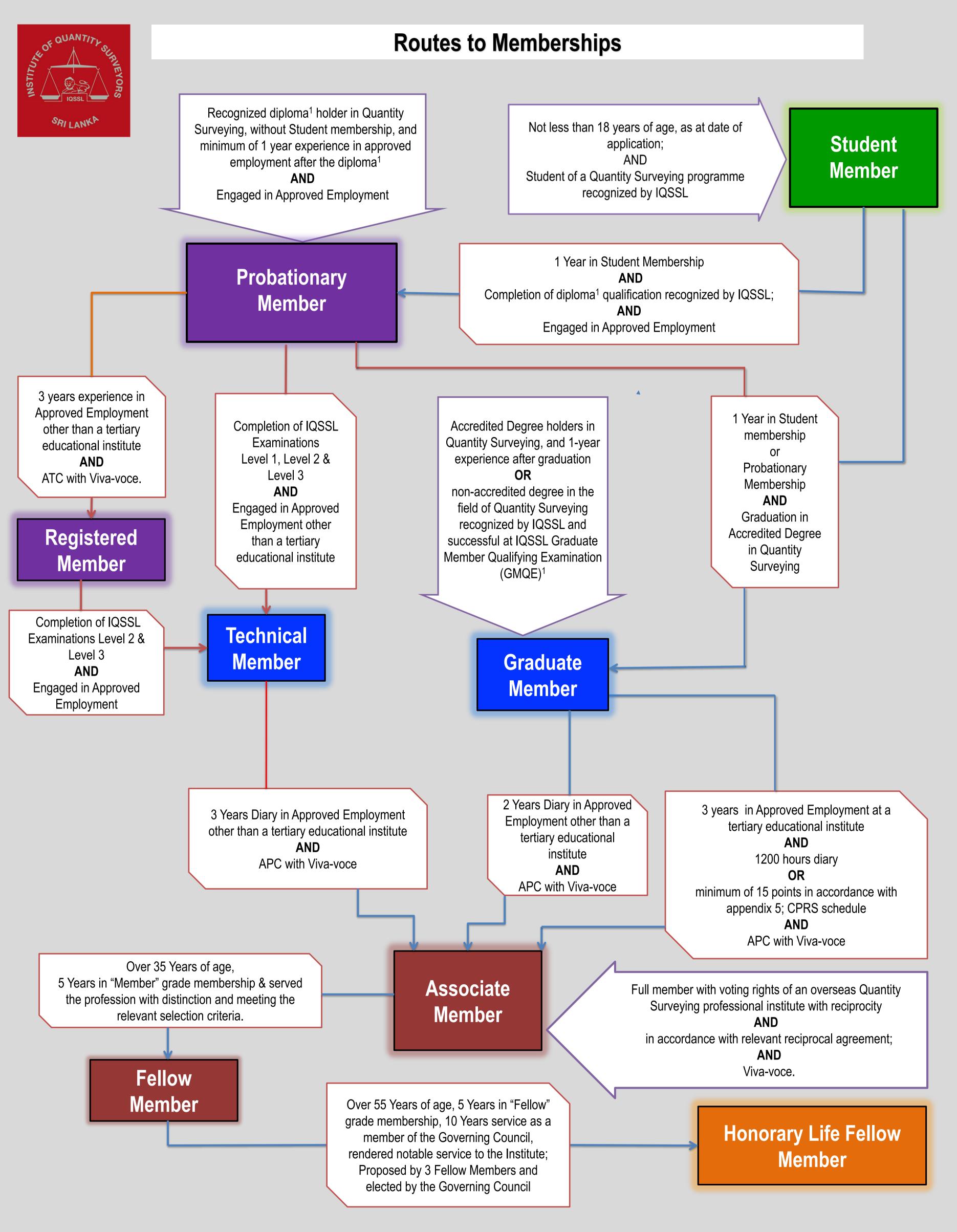
Declaration by the Candidate, Introduction, Key Issue/s, Proposed Options for Solution, Recommended Solution, Appraisal of the Recommendation, implementation of recommended solution, Lessons Learned, Conclusion

4.2 Any Calculations, illustrations, drawings or sketches, etc that you may consider as essential to substantiate, attach them as annexures with numbering as referred to in the critical analysis. Make sure not to attach bundles of papers.

#### 5.0 APC Final Assessment (Viva)

Critical analysis should also to present together with answers to the practice problems at 10 minutes presentation and followed by an interview relating to the matters arising from the critical analysis, answers to Practice Problem, broader aspects of experience, professional ethics and conduct and current issues pertaining to the profession.





# Notes