

**APEL.A**

# PANDUAN PERMOHONAN DAN PENILAIAN CALON

## PENGAKREDITAN PEMBELAJARAN BERASASKAN PENGALAMAN TERDAHULU BAGI TUJUAN AKSES APEL.A UKM



## SENARAI KANDUNGAN

GLOSARI / GLOSSARY.....	1-2
SINGKATAN DAN AKRONIM /ABBREVIATIONS AND ACRONYMS.....	3
BAB 1: PENDAHULUAN / INTRODUCTION.....	4
1.1 LATAR BELAKANG / BACKGROUND.....	4
1.2 PUSAT PENILAIAN APEL UKM / APEL ASSESSMENT CENTRE UKM.....	4-5
BAB 2: DEFINISI DAN KONSEP APEL.A / DEFINITION AND CONCEPT OF APEL.A....	6
2.1 Definisi APEL.A / Definition Of APEL.A.....	6
2.2 Kompetensi Calon / Candidate's Competencies.....	6-7
2.3 SYARAT KEMASUKAN / Entry Requirement.....	8-9
BAB 3: PROSES PERMOHONAN DAN PENILAIAN / Application Process And Assessment	
3.1 Permohonan melalui MQA / Application through MQA.....	10
3.2 Pautan ke Sistem Penilaian Penilaian APEL.A UKM / Link to APEL.A UKM Assessment System	10
3.3 Saringan Awal / Preliminary Screening.....	10-11
3.4 Bayaran Fi Penilaian mengikut Tahap / Assesment Fees for Each Level.....	11
3.5 Komponen Penilaian dan Pemberat Markah / Assessment Component and Marks Weightage.....	12- 13
3.5.1 Ujian Aptitud / Aptitude Test.....	13-15
3.5.2 Penilaian Portfolio dan Temu Duga (T-7 sahaja) / Portfolio Assessment and Interview (T-7 only).....	16-17
3.5.3 Penilaian Portfolio / Portfolio Assessment.....	18
3.5.4 Calon yang Lulus Semua Komponen / Candidates who Pass All Components	19
BAB 4: PANDUAN PENGGUNAAN SISTEM PENILAIAN APEL.A / Guidelines of APEL.A Assessment System.....	20
SENARAI RUJUKAN/ List of References.....	21
Lampiran 1: Carta Alir Permohonan dan Penilaian.....	22
Appendix 1: Flowchart for Application and Assessment.....	22
Lampiran 2: Borang Penilaian Portfolio APEL.....	23-31
Appendix 2: APEL Portfolio Evaluation Form.....	22-31
Lampiran 3: Senarai Pembuktian.....	32
Appendix 3: List of Evidence.....	32
Lampiran 4: Senarai Kemahiran.....	33
Appendix 4: List of Skills.....	33

### **Akreditasi Pembelajaran Berasaskan Pengalaman Terdahulu** *Accreditation of Prior Experiential Learning (APEL)*

APEL merupakan satu proses sistematik yang melibatkan identifikasi, dokumentasi dan penilaian terhadap pembelajaran berasaskan pengalaman terdahulu seperti ilmu pengetahuan, kemahiran dan sikap, untuk menentukan tahap seseorang individu mencapai hasil pembelajaran yang diinginkan, bagi mengakses sesuatu program pengajian.

APEL.A memberi peluang kepada mereka yang mempunyai pengalaman kerja tetapi kurang kelayakan atau tiada kelayakan akademik untuk menyambung pengajian di Institusi Pengajian Tinggi.

*APEL is a systematic process that involves identifying, documenting and assessing prior experiential learning, i.e., knowledge, skills, and attitudes, to determine the extent to which an individual has achieved the desired learning outcomes for access to a programme of study.*

*APEL.A provides an opportunity for those with work experience but lack qualifications or no academic qualifications to continue their studies at Higher Learning Institutions.*

### **Pembelajaran Formal** *Formal Learning*

Pembelajaran bersengaja atau program pengajian yang disampaikan dalam satu konteks yang terancang dan berstruktur (pra-sekolah, sekolah rendah, sekolah menengah, kolej teknikal dan universiti) yang membawa kepada penganugerahan formal / kelayakan yang diiktiraf.

*Intentional learning or programme of study delivered in a planned and structured context (pre-school, primary school, secondary school, technical college, and university) that may lead to formal recognition / a recognized qualification.*

### **Pembelajaran Tidak Formal** *Informal Learning*

Pembelajaran berlaku secara berterusan melalui pengalaman hidup dan kerja (juga dikenali sebagai pembelajaran berasaskan pengalaman). Ia biasanya pembelajaran yang diperoleh secara tidak bersengaja.

*Learning occurs continuously through life and work experiences (sometimes called experiential learning). Learnings are usually gained unintentionally.*

## **Pembelajaran Bukan Formal**

### ***Non-formal Learning***

Pembelajaran yang selari dengan sistem pendidikan dan latihan arus perdana. Ianya boleh dinilai tetapi lazimnya tidak akan membawa kepada persijilan yang formal.

*Learning takes place alongside the mainstream systems of education and training. It may be assessed but does not normally lead to formal certification.*

## **Kerangka Kelayakan Malaysia**

### ***Malaysian Qualifications Framework***

Satu instrumen yang mengklasifikasikan kelayakan berdasarkan satu set kriteria yang diiktiraf di peringkat kebangsaan dan telah ditanda aras dengan amalan terbaik di peringkat antarabangsa.

*An instrument that classifies qualifications based on a set of criteria that are certified nationally and benchmarked against international best practices.*

## SINGKATAN DAN AKRONIM / *ABBREVIATIONS AND ACRONYMS*

APEL.A	Akreditasi Pembelajaran Berasaskan Pengalaman Terdahulu bagi tujuan Akses <i>Accreditation of Prior Experiential Learning for Access</i>
IPT	Institusi Pengajian Tinggi <i>Higher Learning Institutions</i>
MQA	Agensi Kelayakan Malaysia <i>Malaysian Qualifications Agency</i>
MQF	Kerangka Kelayakan Malaysia <i>Malaysian Qualifications Framework</i>

## **BAB-1: PENDAHULUAN / INTRODUCTION**

Panduan ini disediakan kepada calon APEL.A yang merangkumi aspek syarat asas permohonan, proses penilaian dan fi bagi permohonan APEL.A.

*This handbook is provided to APEL.A candidates that covers basic aspects of application requirements, evaluation processes, and fees for APEL.A application.*

### **1.1 LATAR BELAKANG / BACKGROUND**

Kementerian Pendidikan Tinggi Malaysia (KPT) dan Agensi Kelayakan Malaysia (MQA) telah memperkenalkan Akreditasi Pembelajaran Pengalaman Terdahulu (APEL) bagi tujuan menyediakan akses kepada pendidikan tinggi, iaitu APEL bagi tujuan Akses (APEL.A) pada tahun 2010.

APEL.A memberi peluang kepada mereka yang mempunyai pengalaman kerja tetapi kurang kelayakan atau tiada kelayakan akademik untuk menyambung pelajaran di Pemberi Pengajian Tinggi (PPT). Secara umumnya, penilaian APEL.A melibatkan penilaian terhadap ilmu yang diperoleh calon menerusi pendidikan formal mahupun menerusi pengalamannya yang terdahulu.

*The Ministry of Higher Education Malaysia (MOHE) and the Malaysian Qualifications Agency (MQA) introduced the Accreditation of Prior Experiential Learning (APEL) for the purpose of providing access to higher education, called APEL for Access (APEL.A) in 2010.*

*APEL.A provides opportunities for those who have work experience but lack qualifications or no academic qualifications to continue their studies at Higher Education Providers (HEPs). In general, APEL.A assessment involves assessing the knowledge a candidate acquired through formal education or previous experience.*

### **1.2 PUSAT PENILAIAN APEL UKM / APEL ASSESSMENT CENTRE UKM**

Pada tahun 2020, UKM telah mula menerima calon pelajar yang menggunakan sijil APEL.A, bagi mengikuti 52 program di peringkat Sarjana Muda, dan semua program di peringkat Sarjana dengan mod kerja kursus atau mod campuran. UKM kemudiannya telah dipelawa oleh MQA untuk menjadi Pusat Penilaian APEL (PPA) pada tahun 2021, dan diiktiraf sebagai PPA terbuka pada Januari 2023.

Penilaian APEL di PPA UKM merangkumi lima (5) peringkat kemasukan iaitu:

1. Kemasukan ke program Sijil (APEL T-3)
2. Kemasukan ke program Diploma (APEL T-4)
3. Kemasukan ke program Ijazah Sarjana Muda (APEL T-6)
4. Kemasukan ke program Ijazah Sarjana (APEL T-7), dengan mod kerja kursus, mod campuran, dan mod penyelidikan
5. Kemasukan ke program ijazah Kedoktoran (APEL T-8), dengan mod kerja kursus, mod campuran, dan mod penyelidikan

*In 2020, UKM started accepting prospective students with APEL.A certificate to enrol in 52 programs at the Bachelor's level and all Master's level programs, either coursework or mixed mode. UKM was then invited by MQA to become an APEL Assessment Centre (PPA) in 2021, and has been certified as PPA in January 2023.*

*PPA UKM includes five (5) entry levels of assessments, which are:*

- 1. Admission to Certificate programs (APEL T-3)*
- 2. Admission to Diploma programs (APEL T-4)*
- 3. Admission to Bachelor's degree programs (APEL T-6)*
- 4. Admission to Master's degree programs (APEL T-7), by Coursework, Mixed Mode and Fully Research-based*
- 5. Admission to Doctoral degree programs (APEL T-8) by Coursework, Mixed Mode and Fully Research-based.*

## **BAB-2: DEFINISI DAN KONSEP APEL.A / DEFINITION AND CONCEPT OF APEL.A**

### **2.1 DEFINISI APEL.A / DEFINITION OF APEL.A**

APEL bagi tujuan Akses (APEL.A) adalah Akreditasi Pembelajaran Pengalaman Terdahulu bagi tujuan akses kepada program pengajian yang ditawarkan di Institusi Pengajian Tinggi (IPT) kepada calon, melalui penilaian dan pentaksiran berdasarkan pengalaman pembelajaran terdahulu calon tersebut.

Seperti yang telah dinyatakan, di UKM, penilaian APEL.A terbahagi kepada lima (5) peringkat kemasukan iaitu:

1. Kemasukan ke program Sijil (APEL T-3)
2. Kemasukan ke program Diploma (APEL T-4)
3. Kemasukan ke program Sarjana Muda (APEL T-6)
4. Kemasukan ke program Sarjana (APEL T-7)
5. Kemasukan ke program Kedoktoran (APEL T-8)

*APEL for Access (APEL.A) is the Accreditation of Prior Experiential Learning for the purpose of access to programmes of study offered at Institutions of Higher Learning (IPT) to candidates through assessment and evaluation based on the candidate's previous learning experience.*

*As mentioned before, in UKM, there are five (5) entry levels of assessments, namely:*

1. *Admission to Certificate programs (APEL T-3)*
2. *Admission to Diploma programs (APEL T-4)*
3. *Admission to Bachelor's degree programs (APEL T-6)*
4. *Admission to Master's degree programs (APEL T-7)*
5. *Admission to Doctorate programs (APEL T-8)*

### **2.2 KOMPETENSI CALON / CANDIDATE'S COMPETENCIES**

Kecekapan yang diperlukan untuk penilaian APEL.A adalah berdasarkan kepada lima kelompok hasil pembelajaran MQF, untuk memastikan bahawa calon mempunyai kecekapan minimum berikut untuk melanjutkan pelajaran ke peringkat yang lebih tinggi:

1. Pengetahuan dan kefahaman.
2. Kemahiran kognitif.
3. Kemahiran kerja fungsian dengan memberi tumpuan kepada:
  - i. kemahiran praktikal.
  - ii. kemahiran interpersonal dan komunikasi.
  - iii. kemahiran digital dan celik angka.
  - iv. kepimpinan, autonomi dan tanggungjawab.
4. Kemahiran peribadi dan keusahawanan.
5. Etika dan profesionalisme.



The required competencies for APEL.A assessments are based on MQF's five clusters of learning outcomes to ensure that applicants will have the following minimum competencies to pursue higher education:

1. Knowledge and understanding.
2. Cognitive skills.
3. Functional work skills which focus on:
  - i. practical skills.
  - ii. interpersonal and communication skills.
  - iii. digital and numeracy skills.
  - iv. leadership, autonomy and responsibility.
4. Interpersonal and entrepreneurial skills.
5. Ethics and professionalism.

## 2.3 SYARAT KEMASUKAN / ENTRY REQUIREMENT

Calon hendaklah mematuhi tahap kriteria pengajian yang ditetapkan oleh Kementerian Pendidikan Tinggi Malaysia (KPT) seperti berikut:

*Candidate should comply with the level of study criteria set by the Ministry of Higher Education (MOE) as follows:*

- **Kemasukan ke Program Peringkat Sarjana**  
*Admission to Master's Degree programs*

No.	Syarat Kemasukan <i>Entry Requirements</i>	Dokumen <i>Documents</i>
1.	Warganegara Malaysia / Golongan ekspatriat (dan ahli keluarga) <i>Malaysian citizen / expatriate (and family members)</i>	Salinan MyKad yang telah disahkan/ Salinan passport yang telah disahkan <i>A certified copy of MyKad</i> <i>A certified copy of the passport</i>
2.	Berumur sekurang- kurangnya 30 tahun semasa tarikh permohonan <i>At least 30 years of age in the year of application</i>	Salinan sijil akademik berkaitan beserta transkrip yang telah disahkan <i>Copies of relevant academic certificates along with certified transcripts</i>
3.	Memiliki kelayakan STPM / Diploma / kelayakan lain yang diiktiraf setara dengannya <i>Possess at least STPM/Diploma/recognized equivalent qualification</i>	
4.	Mempunyai pengalaman kerja yang berkaitan <i>Possess relevant work experience</i>	

- **Kemasukan ke Program Peringkat Sijil / Diploma/ Sarjana Muda**  
*Admission to Certificate / Diploma/ Bachelor's Degree programs*

No.	Syarat Kemasukan <i>Entry Requirements</i>	Dokumen <i>Documents</i>
1.	Warganegara Malaysia / Golongan ekspatriat (dan ahli keluarga) <i>Malaysian citizen / expatriate (and family members)</i>	Salinan MyKad yang telah disahkan/ Salinan passport yang telah disahkan <i>A certified copy of MyKad</i> <i>A certified copy of the passport</i>
2.	<ul style="list-style-type: none"> <li>• <b>Peringkat Sijil:</b> Berumur sekurang-kurangnya 19 tahun semasa tarikh permohonan</li> <li>• <b>Certificate Level:</b> <i>At least 19 years of age in the year of application</i></li> <li>• <b>Peringkat Diploma:</b> Berumur sekurang-kurangnya 20 tahun semasa tarikh permohonan</li> <li>• <b>Diploma Level:</b> <i>At least 20 years of age in the year of application</i></li> <li>• <b>Peringkat Sarjana Muda:</b> Berumur sekurang-kurangnya 21 tahun semasa tarikh permohonan</li> <li>• <b>Bachelor's Degree Level:</b> <i>At least 21 years of age in the year of application</i></li> </ul>	
3.	Mempunyai pengalaman kerja yang berkaitan <i>Possess relevant work experience</i>	

## **BAB-3: PROSES PERMOHONAN DAN PENILAIAN / APPLICATION PROCESS AND ASSESSMENT**

### **3.1 PERMOHONAN MELALUI MQA / APPLICATION THROUGH MQA**

Calon perlu mengemukakan permohonan melalui laman sesawang MQA: [https://www2.mqa.gov.my/apel\\_a/](https://www2.mqa.gov.my/apel_a/). Lampiran 1 menyediakan carta alir bagi proses permohonan dan penilaian.

*Candidates must apply through MQA's website: [https://www2.mqa.gov.my/apel\\_a/](https://www2.mqa.gov.my/apel_a/). Appendix 1 provides a flowchart for the application and assessment process.*

### **3.2 PAUTAN KE SISTEM PENILAIAN APEL.A UKM / LINK TO APEL.A UKM ASSESSMENT SYSTEM**

Calon akan menerima pautan Sistem Penilaian APEL.A UKM melalui emel, bagi membolehkan calon mendaftar permohonan. Bagi calon APEL T-7, permohonan adalah berdasarkan kepada bidang pengajian yang ditawarkan di UKM. Senarai bidang pengajian untuk APEL T-7 boleh dirujuk di laman sesawang berikut: <https://www.ukm.my/apel/apel-a-senarai-program-pascasiswazah-2/>.

*Candidates will receive an email link to UKM's APEL.A Assessment System to enable candidates to register their application. For APEL T-7 candidates, the application is based on fields of study offered in UKM. The list of fields of study for APEL T-7 can be referred to at <https://www.ukm.my/apel/apel-a-senarai-program-pascasiswazah-2/>.*

### **3.3 SARINGAN AWAL / PRELIMINARY SCREENING**

UKM akan menerima pemakluman permohonan calon APEL.A dan melakukan saringan awal bagi mengesahkan calon APEL.A yang layak untuk melalui proses penilaian. Saringan awal melibatkan pengesahan untuk perkara-perkara berikut:

- i. Kerakyatan calon
- ii. Umur calon mengikut tahap pengajian permohonan APEL.A
- iii. Kelayakan akademik terdahulu calon (T-7 sahaja)
- iv. Status pengiktirafan/akreditasi program bagi kelayakan terdahulu calon (T-7 sahaja).

**Nota:**

Calon T-7 boleh merujuk ke laman web MQA

<https://www2.mqa.gov.my/esisraf/kelayakan.cfm> bagi menyemak perkara (iv).

UKM will receive a notification of APEL.A candidate applications and conduct a preliminary screening to confirm APEL.A candidates eligible to undergo the assessment process. Preliminary screening involves verification of the following:

- i. Candidate citizenship
- ii. Age of candidate according to the level of APEL.A application
- iii. Candidate's previous academic qualifications (T-7 only)
- iv. Program recognition/accreditation status for candidate's previous qualification (T-7 only)

**Note:**

T-7 candidates can refer to the MQA website

<https://www2.mqa.gov.my/esisraf/kelayakan.cfm> to check for point (iv).

### 3.4 BAYARAN FI PENILAIAN MENGIKUT TAHAP/ ASSESSMENT FEES FOR EACH LEVEL

Bayaran fi penilaian APEL.A bagi calon yang layak mengikut tahap adalah seperti berikut:

*APEL.A assessments fee for eligible candidates for respective levels are as follows:*

Bil.	Tahap / Level	Jumlah bayaran / Fee (RM)	Kaedah Pembayaran / Payment method
1.	Sijil/ <i>Certificate</i> (APEL T-3) Diploma (APEL T-4)	RM 240.00	Pembayaran kepada Bendahari UKM melalui sistem permohonan di Sistem Pengurusan APEL UKM.  <i>Payment should be made to Bendahari UKM through UKM APEL Management system.</i>  <b>Note:</b> Pembayaran wajib dibuat melalui sistem <i>payment gateway</i> .  <b>Note:</b> <i>Payment must be made through the system's payment gateway.</i>
2.	Ijazah Sarjana Muda (APEL T-6) <i>Bachelor's Degree</i>	RM 370.00	
		USD500 ( <i>non-malaysian citizen</i> )	
3.	Ijazah Sarjana (APEL T-7) <i>Master's Degree</i>	RM 560.00	
		USD750 ( <i>non-malaysian citizen</i> )	
4.	Ijazah Kedoktoran (APEL T-8) <i>Doctoral Degree</i>	RM750	

**Note:**

Bayaran fi penilaian yang telah dilakukan tidak akan dikembalikan.

*Note: All fees are not refundable.*

### 3.5 BAYARAN FI ULANGAN BAGI SETIAP KOMPONEN/ *REPEAT FEES FOR EACH COMPONENT*

Jadual berikut menerangkan tentang jumlah fi yang perlu dibayar oleh calon sekiranya gagal sesuatu komponen penilaian. Calon perlu membuat bayaran fi penilaian mengikut Tahap menerusi Sistem Pengurusan APEL UKM.

*The following table describes the fees that the candidate must pay in case of failing any of the assessment components. Candidates need to pay the assessment fee according to the level through UKM APEL Management system.*

Bil.	Tahap Level	Bayaran Ulangan Repeat Fee		
		Aptitud Aptitude	Portfolio	Temuduga Interview
1.	T-3 T-4	RM155	-	-
2.	T6	RM150	RM80	-
3.	T-7	RM200	RM80	RM75

### 3.6 KOMPONEN PENILAIAN DAN PEMBERAT MARKAH / *ASSESSMENT COMPONENT AND MARKS WEIGHTAGE*

Komponen penilaian meliputi:

1. APEL T-3 dan APEL T-4: Ujian Aptitud (wajib lulus) dan Penilaian Portfolio (tiada pemberat : hanya untuk pengesahan pengalaman terdahulu sahaja)
2. APEL T-6: Ujian Aptitud dan Penilaian Portfolio (wajib lulus)
3. APEL T-7: Ujian Aptitud, Penilaian Portfolio dan Temu duga (wajib lulus)

Markah penuh bagi semua komponen penilaian ialah 100%. Berikut merupakan pemberat markah bagi setiap komponen penilaian mengikut tahap:

*The assessment components include:*

1. *APEL T-3 and APEL T-4: Aptitude Test (must pass) and Portfolio Assessment (no marks weightage: for verification of previous experience only)*
2. *APEL T-6: Aptitude Test and Portfolio Assessment (must pass)*
3. *APEL T-7: Aptitude Test, Portfolio Assessment, and Interview (must pass)*

*The total mark for all components is 100%. The table below shows the weightage marks for each assessment component for each level:*

Ujian / Tahap <i>Assessment / Level</i>	Sijil / Certificate (APEL T-3) & Diploma (APEL T-4)	Sarjana Muda / <i>Bachelor's Degree</i> (APEL T-6)	Sarjana / <i>Master's Degree</i> (APEL T-7)
Ujian Aptitud <i>Aptitude Test</i>	100%	30%	40%
Penilaian Portfolio <i>Portfolio Assessment</i>	-	70%	40%
Temuduga <i>Interview</i>	-	-	20%
Markah Keseluruhan <i>Total marks</i>	100%	100%	100%
<b>Markah Lulus</b> <i>Passing marks</i>	<b>50%</b>	<b>50%</b>	<b>50%</b>

Untuk Lulus, calon bagi semua tahap mestilah:

- Memperoleh markah minimum 50% dari Ujian Aptitud
- Memperoleh markah minimum 50% dari Portfolio (APEL T-6 dan APEL T-7)
- Memperoleh markah minimum 50% dari Temuduga (T-7 sahaja)
- Memperoleh markah 50% dari markah keseluruhan

*To pass the assessment, candidates for all levels must:*

- *obtained a minimum score of 50% on the Aptitude Test*
- *obtained a minimum score of 50% on the Portfolio Assessment (APEL T-6 and APEL T-7)*
- *obtained a minimum score of 50% on the Interview (APEL T-7 only)*
- *obtained a score of 50% of the total score*

### 3.6.1 Ujian Aptitud / *Aptitude Test*

Ujian Aptitud merupakan peperiksaan formal untuk menilai tahap kompetensi dan kesediaan calon mengikuti pembelajaran di peringkat yang lebih tinggi. Komponen ujian adalah dari aspek celik angka, bahasa, dan pengetahuan am / pemikiran kritis. Ujian ini meliputi sebanyak 40% bagi Sarjana (T-7), 30% bagi Sarjana Muda (T-6) dan 100% bagi Sijil (T-3) dan Diploma (T-4) bagi keseluruhan markah penilaian APEL.A. Bahagian seterusnya akan menerangkan struktur Ujian Aptitud.

*The Aptitude Test is a formal examination to assess the level of competence and readiness of candidates to study at a higher level. The test components are numerical literacy, language, and general knowledge/critical thinking. This test covers 40% for Masters (T-7), 30% for Bachelors (T-6) and 100% for Diplomas (T-4) and Certificates (T-3) for the total marks of APEL.A assessment. The following section will explain the structure of the Aptitude Test.*

## Ujian Aptitud bagi APEL T-3, T-4 dan T-6

### *Aptitude Test for APEL T-3, T-4, and T-6*

<b>Komponen Component</b>	<b>Soalan Questions</b>	<b>Tahap Kesukaran Difficulty level</b>	<b>Tempoh Masa Duration</b>
<b>Bahasa Melayu</b> <ul style="list-style-type: none"> <li>Bacaan &amp; Pemahaman</li> <li>Tatabahasa &amp; Prosa kata</li> <li>Ejaan</li> <li>Perbendaharaan kata</li> <li>Pembetulan kesalahan</li> </ul> <b>Malay Language</b> <ul style="list-style-type: none"> <li><i>Reading &amp; Comprehension</i></li> <li><i>Grammar &amp; prose</i></li> <li><i>Spelling</i></li> <li><i>Vocabulary</i></li> <li><i>Correction of Errors</i></li> </ul>	10 Soalan Objektif <i>10 Objective questions</i>	<b>APEL T-3</b> di antara UPSR dan PMR <i>UPSR and PMR (Grade/Year 9) or equivalent</i>  <b>APEL T-4</b> PMR dan setara <i>PMR (Grade/Year 9) or equivalent</i>  <b>APEL T-6</b> SPM dan setara <i>SPM (Grade/Year 11) or equivalent</i>	2 jam <i>2 hours</i>
<b>Bahasa Inggeris</b> <ul style="list-style-type: none"> <li>Bacaan &amp; Pemahaman</li> <li>Tatabahasa &amp; Prosa kata</li> <li>Ejaan</li> <li>Perbendaharaan kata</li> <li>Pembetulan kesalahan</li> </ul> <b>English Language</b> <ul style="list-style-type: none"> <li><i>Reading &amp; Comprehension</i></li> <li><i>Grammar &amp; prose</i></li> <li><i>Spelling</i></li> <li><i>Vocabulary</i></li> <li><i>Correction of Errors</i></li> </ul>	10 Soalan Objektif <i>10 Objective questions</i>		
<b>Matematik</b> <ul style="list-style-type: none"> <li>Asas matematik</li> <li>Algebra asas</li> <li>Penyelesaian masalah</li> </ul> <b>Mathematics</b> <ul style="list-style-type: none"> <li><i>Basic numeracy</i></li> <li><i>Basic algebra</i></li> <li><i>Problem-solving</i></li> </ul>	10 Soalan Objektif <i>10 Objective questions</i>		
<b>Pengetahuan Am / Pemikiran Kritis</b> <ul style="list-style-type: none"> <li>Penaakulan Logik</li> <li>Kemahiran Pengelasan</li> <li>Pengecaman Pola</li> </ul> <b>General knowledge / Critical thinking</b> <ul style="list-style-type: none"> <li><i>Logical reasoning</i></li> <li><i>Classification skills</i></li> <li><i>Pattern recognition</i></li> </ul>	10 Soalan Objektif <i>10 Objective questions</i>		
<b>TOTAL</b>	<b>40</b>		

\*Calon mestilah memperoleh 50% dari Ujian Aptitud untuk lulus.

*\*Candidates must obtain 50% in the Aptitude test to pass.*

**Ujian Aptitud bagi APEL T-7:**

*Aptitude Test for APEL T-7*

<b>Komponen Component</b>	<b>Soalan Questions</b>	<b>Tahap Kesukaran Difficulty level</b>	<b>Tempoh Masa Duration</b>
<p><b>Bahasa Melayu</b></p> <ul style="list-style-type: none"> <li>Bacaan &amp; Pemahaman</li> <li>Tatabahasa &amp; Prosa kata</li> <li>Ejaan</li> <li>Perbendaharaan kata</li> <li>Pembetulan kesalahan</li> </ul> <p><b>Malay Language</b></p> <ul style="list-style-type: none"> <li><i>Reading &amp; Comprehension</i></li> <li><i>Grammar &amp; prose</i></li> <li><i>Spelling</i></li> <li><i>Vocabulary</i></li> <li><i>Correction of Errors</i></li> </ul>	<p><b>Bahagian A:</b> 13 Soalan Objektif</p> <p><b>Bahagian B:</b> 1 Soalan Struktur</p> <p><b>Part A:</b> <i>13 Objective questions</i></p> <p><b>Part B:</b> <i>1 structured question</i></p>	<p><b>APEL T-6</b> Ijazah Sarjana Muda (tahun pertama)</p> <p><i>1st year of the Bachelor's degree</i></p>	<p>2 jam 30 minit</p> <p><i>2 Hours 30 minutes</i></p>
<p><b>Bahasa Inggeris</b></p> <ul style="list-style-type: none"> <li>Bacaan &amp; Pemahaman</li> <li>Tatabahasa &amp; Prosa kata</li> <li>Ejaan</li> <li>Perbendaharaan kata</li> <li>Pembetulan kesalahan</li> </ul> <p><b>English Language</b></p> <ul style="list-style-type: none"> <li><i>Reading &amp; Comprehension</i></li> <li><i>Grammar &amp; prose</i></li> <li><i>Spelling</i></li> <li><i>Vocabulary</i></li> <li><i>Correction of Errors</i></li> </ul>	<p><b>Bahagian A:</b> 12 Soalan Objektif</p> <p><b>Bahagian B:</b> 1 Soalan Struktur</p> <p><b>Part A:</b> <i>12 Objective questions</i></p> <p><b>Part B:</b> <i>1 structured question</i></p>		
<p><b>Matematik</b></p> <ul style="list-style-type: none"> <li>Asas matematik</li> <li>Algebra asas</li> <li>Penyelesaian masalah</li> </ul> <p><b>Mathematics</b></p> <ul style="list-style-type: none"> <li><i>Basic numeracy</i></li> <li><i>Basic algebra</i></li> <li><i>Problem-solving</i></li> </ul>	<p><b>Bahagian A:</b> 25 Soalan Objektif</p> <p><b>Bahagian B:</b> 1 Soalan Struktur</p> <p><b>Part A:</b> <i>25 Objective questions</i></p> <p><b>Part B:</b> <i>1 structured question</i></p>		
<p><b>Pengetahuan Am / Pemikiran Kritis</b></p> <ul style="list-style-type: none"> <li>Penaakulan Logik</li> <li>Kemahiran Pengelasan</li> <li>Pengecaman Pola</li> </ul> <p><b>General knowledge / Critical thinking</b></p> <ul style="list-style-type: none"> <li><i>Logical reasoning</i></li> <li><i>Classification skills</i></li> <li><i>Pattern recognition</i></li> </ul>	<p><b>Bahagian A:</b> 25 Soalan Objektif</p> <p><b>Bahagian B:</b> 2 Soalan Struktur</p> <p><b>Part A:</b> <i>25 Objective questions</i></p> <p><b>Part B:</b> <i>2 structured questions</i></p>		
<b>TOTAL</b>	<b>80 Soalan</b>		

\*Calon mestilah memperoleh 50% dari Ujian Aptitud untuk lulus.

*\*Candidates must obtain 50% in the Aptitude Test to pass.*



### 3.6.2 Penilaian Portfolio dan Penilaian Temuduga (T-7 sahaja)

#### *Portfolio Assessment and Interview (T-7 only)*

Calon yang telah mengambil Ujian Aptitud akan menerima keputusan ujian tersebut, dan berdasarkan keputusan yang diperolehi:

- (a) Calon yang **lulus Ujian Aptitud** perlu menyediakan dokumen portfolio diri dan menghantarnya melalui sistem.

Portfolio merupakan satu dokumen kompilasi pengalaman terdahulu, termasuklah pembelajaran formal, tidak formal dan bukan formal. Calon perlu menyediakan portfolio mengikut format yang ditetapkan oleh MQA seperti dalam Lampiran 2.

- **Untuk APEL T-3 dan T-4:** Dokumen portfolio diri akan digunakan sebagai pengesahan pengalaman terdahulu untuk mendapatkan Sijil APEL.A.
- **Untuk APEL T-6:** penilaian akan dilakukan ke atas portfolio yang diserahkan oleh calon yang meliputi 70% dari markah keseluruhan penilaian APEL.A. Calon wajib lulus penilaian portfolio untuk mendapatkan Sijil APEL.A.
- **Untuk APEL T-7:** penilaian akan dilakukan ke atas portfolio yang diserahkan oleh calon yang meliputi 40% dari markah keseluruhan penilaian APEL.A. Calon wajib lulus penilaian portfolio untuk layak ke sesi temuduga. Tujuan sesi temuduga adalah untuk mengesahkan bukti yang disertakan dalam portfolio serta memberi ruang kepada calon untuk menerangkan dengan lebih terperinci nilai pengalaman yang diperolehi. Temuduga meliputi 20% dari markah keseluruhan penilaian APEL T-7.

- (b) Calon yang **gagal Ujian Aptitud**:

- Calon boleh membuat permohonan untuk mengulang Ujian Aptitud.
- Ujian ulangan adalah sebanyak dua (2) kali pada bila-bila masa, selepas menduduki Ujian Aptitud kali yang pertama. Jika calon gagal selepas dua (2) kali ulangan, calon perlu menunggu selama tiga (3) bulan untuk ujian ulangan kali ke-3 dan ke-4, dan seterusnya.
- Calon akan dikenakan bayaran bagi setiap ujian ulangan tersebut.
- Bayaran ulangan Ujian Aptitud adalah RM155.00 bagi (T-3, T-4, dan T-6) manakala RM200 bagi (T-7).

(c) Calon yang **gagal Penilaian Portfolio**:

- Calon boleh membuat permohonan untuk mengulang Penilaian Portfolio.
- Calon dibenarkan untuk mengulang selepas enam (6) bulan.
- Calon akan dikenakan bayaran bagi setiap ujian ulangan tersebut.
- Bayaran ulangan bagi Penilaian Portfolio bagi (T-6 dan T-7).

(d) Calon yang **gagal Penilaian Portfolio/Temuduga (T-7)**:

- Calon yang gagal penilaian temuduga diwajibkan mengulang kedua-dua komponen penilaian Portfolio dan Temuduga, dengan kadar caj ulangan sebanyak RM170.00.

*Candidates will receive the Aptitude Test result. Based on the result:*

*(a) Candidates who **pass the Aptitude Test** must prepare and submit a portfolio through the system.*

*A portfolio is a compilation of documents of previous experience, including formal, informal and non-formal learning. Candidates must prepare their portfolio according to the format given by MQA, as shown in Appendix 2.*

- ***For APEL T-3 and T-4**, the submitted portfolio will be used to validate previous experience in order to obtain the APEL.A Certificate.*
- ***For APEL T-6**: the submitted portfolio will be assessed, covering 70% of the overall score of APEL.A assessment. Candidates must pass the portfolio assessment to obtain the APEL.A Certificate.*
- ***For APEL T-7**: the submitted portfolio will be assessed, which covers 40% of the overall score of APEL.A assessment. Candidates must pass the portfolio assessment to qualify for the interview session. The interview session aims to confirm the evidence included in the portfolio and give the candidate an opportunity to further explain the related experiences. The interview carries 20% of the overall score of the APEL T-7 assessment.*

*(b) Candidates who **fail the Aptitude Test**:*

- *Candidates can request to re-sit the Aptitude Test.*
- *Candidates can re-sit the Aptitude Test twice, anytime after the first test. If the candidate still fails after two (2) retakes, the candidate has to wait three (3) months for the 3<sup>rd</sup> and 4<sup>th</sup> retake tests, and so on.*
- *Candidates will be charged for each re-sit test.*
- *The re-sit charge for the Aptitude Test is RM155 for (T-3,4,6) while RM200 for (T-7).*

(c) **Candidates who fail the Portfolio Assessment:**

- *Candidates can request to re-sit the Portfolio Assessment.*
- *Candidates can re-sit the Portfolio Assessment after six (6) months.*
- *Candidates will be charged for each re-sit test.*
- *The re-sit charge for Portfolio Assessment is RM80 for (T-6 and T-7).*

(d) **Candidates who fail the Portfolio/Interview Assessments (T-7):**

- *Candidates who failed portfolio assessment or interview, candidates must re-sit both assesment components eventhough failed either one of the components with re-sit charge RM170.00 for (T-7).*

### 3.6.3 Penilaian Portfolio

#### **Portfolio Assessment**

Penilaian Portfolio dilakukan oleh dua (2) orang panel penilai, dan untuk APEL T-7, penilai adalah daripada pakar bidang berkaitan. Oleh itu, calon perlulah memilih bukti yang ingin dikemukakan dalam portfolio mengikut kesesuaian bidang yang dipohon. Bagi pembelajaran bersijil, calon perlu mengemukakan sijil yang telah disahkan. Bagi pembelajaran berasaskan pengalaman, calon boleh mengemukakan bukti dalam bentuk testimoni daripada majikan atau pelanggan, atau rakan sekerja. Calon boleh merujuk kepada Lampiran 3 bagi melihat contoh-contoh bukti yang boleh dimuatkan dalam portfolio.

*The portfolio will be handled by two (2) panels of evaluators, and for APEL T-7, the evaluators are expertise from relevant fields. Therefore, candidates must choose the evidence according to the field they are applying for. For formal learning, candidates need to submit a certified documents. For experiential learning, candidates can submit evidences in the form of testimonials from employers, or clients, or colleagues. Appendix 3 provides the types of evidence that can be used in the portfolio.*

### 3.6.4 Calon yang lulus semua komponen

#### **Candidates who pass all components**

Calon yang lulus Ujian Aptitud (untuk semua tahap), penilaian portfolio (APEL T-6 dan T-7 sahaja) dan temuduga (APEL T-7 sahaja) akan diberikan Sijil APEL.A oleh MQA. Sijil APEL.A hanya boleh digunakan untuk tujuan melanjutkan pelajaran ke IPT. Ianya bukanlah penganugerahan kelayakan seperti mana program akademik. Sijil APEL.A juga tidak boleh digunakan untuk tujuan pekerjaan.

*Candidates who pass the Aptitude Test (all levels), portfolio assessment (APEL T-6 and T-7 only), and interview (APEL T-7 only) will be awarded an APEL.A Certificate by MQA. The APEL.A certificate can only be used for further studies. It is not a qualification award like an academic program. The APEL.A certificate also cannot be used for employment purposes.*

## **BAB-4: PANDUAN PENGGUNAAN SISTEM PENILAIAN APEL.A/ A GUIDE ON APEL.A ASSESSMENT SYSTEM**

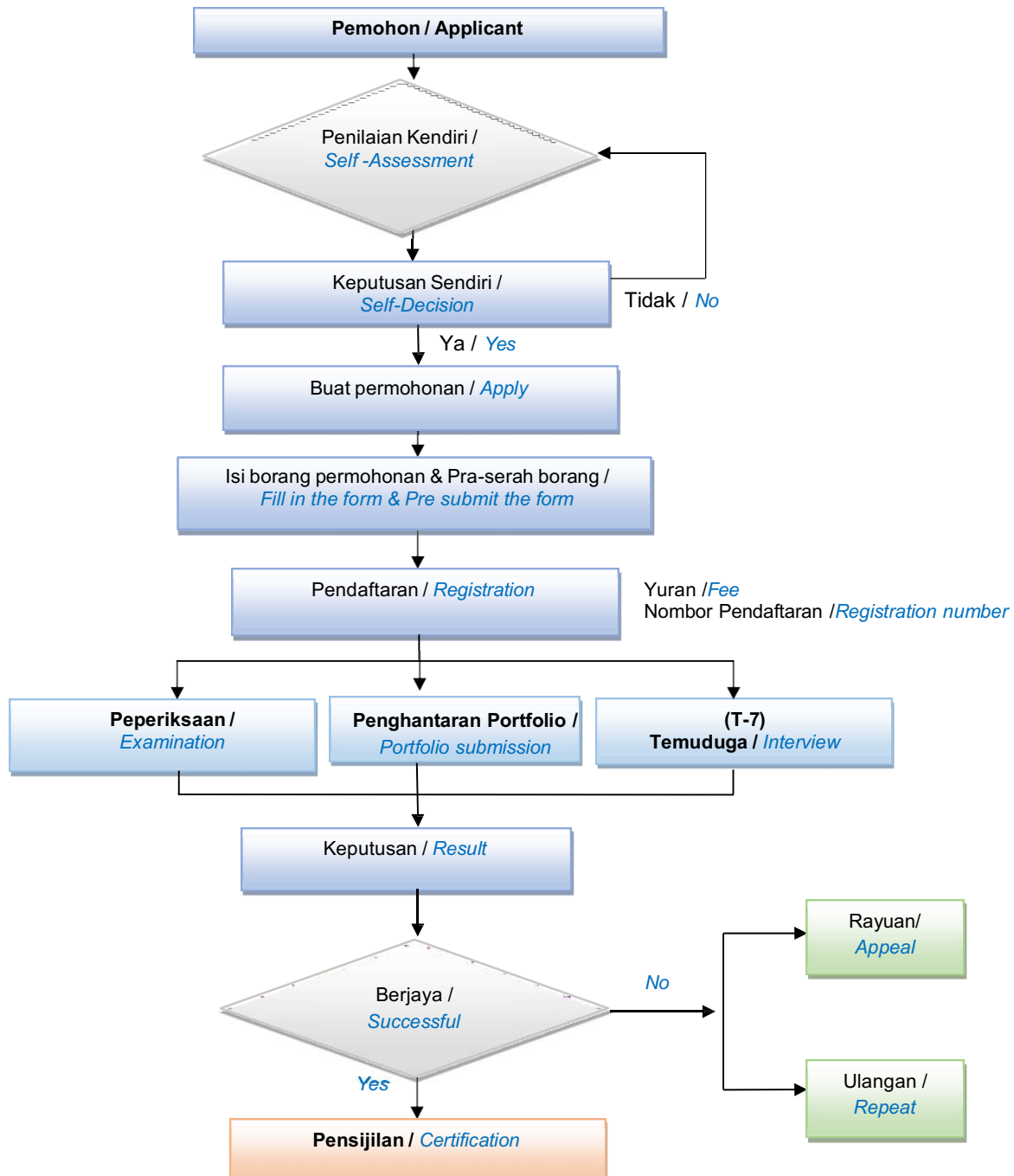
Manual pengguna bagi sistem penilaian APEL.A boleh dirujuk oleh calon melalui pautan <https://apel.ukm.my/lms/mod/book/view.php?id=47>.

*Candidates can refer to the user manual for the APEL assessment system at <https://apel.ukm.my/lms/mod/book/view.php?id=47>.*

## SENARAI RUJUKAN / LIST OF REFERENCES

Panduan Penilaian Pengakreditasi Pembelajaran Berasaskan Pengalaman Terdahulu Bagi Tujuan Akses (*Accreditation of Prior Experiential Learning for Access*), 2021. MQA.

**Lampiran 1: Carta Alir Permohonan dan Penilaian**  
**Appendix 1: Flowchart for Application and Assessment**



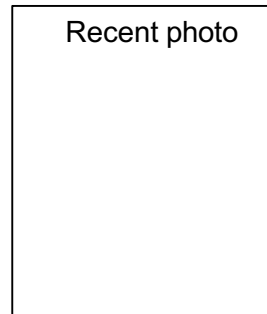
**Nota/Note:**

Tempoh masa untuk penilaian bergantung pada tahap kemajuan permohonan.  
*The duration for an assessment will depend on the progress of the application.*

**Lampiran 2 : Borang Penilaian Portfolio APEL**  
**Appendix 2 : APEL Portfolio Evaluation Form**

**APEL PORTFOLIO EVALUATION FORM**

Recent photo



**PART 1 : PERSONAL DETAILS**

<b>FULL NAME</b>								
<b>IC NUMBER</b>								
<b>INTENDED FIELD OF STUDY</b>								
<b>INTENDED PROGRAMME</b>								
<b>LEVEL OF STUDY</b>	<input type="checkbox"/>	<b>Certificate</b>	<input type="checkbox"/>	<b>Diploma</b>	<input type="checkbox"/>	<b>Bachelor</b>	<input type="checkbox"/>	<b>Master</b>
<b>REFERENCE NUMBER</b>	(for MQA use only)							

**PART 2: DETAILS OF LEARNING ACQUIRED** (start with the most recent)

**a) FORMAL LEARNING**

Intentional learning/programme of study delivered within an organisation and structured context (pre-school, primary school, secondary school, technical college and university) that may lead to formal recognition / a recognised qualification.

NO.	ACADEMIC QUALIFICATION	AWARDING BODY/ INSTITUTION	YEAR AWARDED	COMPETENCIES											EVIDENCE OF LEARNING* (Please refer Appendix 3 for examples of evidence)	
				(Please tick ✓)												
				(Please refer Appendix 4 for list of skills on what I have learnt)												
				1	2	3	4	5	6	7	8	9	10	11		
1.																
2.																
3.																
4.																
5.																

**\*Note: All evidence must be properly labelled**



**b) INFORMAL LEARNING** (Compulsory) (start with the most recent)

Learning which takes place continuously through life and work experiences (sometimes known as experiential learning). It is often unintentional learning.

NO.	NAME OF EMPLOYER/ SELF-EMPLOYED	CONTACT ADDRESS	DURATION (MONTH/YEAR)		POSITION HELD	WHAT I HAVE LEARNT/ACQUIRED (Please tick ✓) (Please refer Appendix 4 for list of skills on what I have learnt)											EVIDENCE OF LEARNING* (Please refer Appendix 3 for examples of evidence)
			FROM	TO		1	2	3	4	5	6	7	8	9	10	11	
1.																	
2.																	
3.																	
4.																	
5.																	
6.																	

**\*Note: All evidence must be properly labelled**

OTHER LEARNING ACTIVITIES This may include your hobbies/ sports/ recreation/ social/ community service/ training given/ consultancy services or other activities which might be relevant to the competencies.	YEAR	WHAT I HAVE LEARNT/ACQUIRED (Please tick ✓) (Please refer Appendix 4 for list of skills on what I have learnt)											EVIDENCE OF LEARNING* (if any) (Please refer Appendix 3 for examples of evidence)	
		1	2	3	4	5	6	7	8	9	10	11		
1														
2														
3														
4														

**\*Note: All evidence must be properly labelled**

**c) NON-FORMAL LEARNING** (start with the most recent)

Learning that takes place alongside the mainstream systems of education and training. It may be assessed but does not normally lead to formal certification.

NO	NAME/ TITLE OF TRAINING OR COURSE	ORGANISER/ LOCATION	DATE	LENGTH (Hours/ Days/ Month)	WHAT I HAVE LEARNT/ACQUIRED											EVIDENCE OF LEARNING* (if any) (Please refer Appendix 3 for examples of evidence)
					(Please tick ✓)  (Please refer Appendix 4 for list of skills on what I have learnt)											
					1	2	3	4	5	6	7	8	9	10	11	
1.																
2.																
3.																
4.																
5.																
6.																
7.																

**\*Note: All evidence must be properly labelled**

**d) LANGUAGE COMPETENCY**

LANGUAGE		LEVEL OF COMPETENCE (Please tick ✓) 1: POOR; 2: AVERAGE; 3: GOOD; 4: EXCELLENT															
		LISTENING				READING				SPEAKING				WRITING			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.																	
2.																	
3.																	

**e) SELF ASSESSMENT/REFLECTION** (Compulsory)

**Describe how your prior learning experiences prepare you for the intended level of study (at least 500 words):**

**Note: not more than 250 words (for APEL T-3 and T-4 only)**

1. Why do you want to pursue this intended programme of study?
2. How is your prior learning experience applicable to/related to/relevant to your chosen field of study?
3. What are your action plans in ensuring the successful completion of your programme? (Commitment, time management, financial resources and support etc).
4. How will the completion of this programme help you in your life?

**REFEREES** (Family members and relatives cannot serve as referees)

<b>NAME</b>		
<b>POSITION</b>		
<b>ORGANISATION</b>		
<b>PHONE NUMBER</b>	<b>OFFICE:</b> <i>(Compulsory)</i>	<b>MOBILE:</b>
<b>EMAIL ADDRESS</b>		
<b>RELATIONSHIP</b>		

<b>NAME</b>		
<b>POSITION</b>		
<b>ORGANISATION</b>		
<b>PHONE NUMBER</b>	<b>OFFICE:</b> <i>(Compulsory)</i>	<b>MOBILE:</b>
<b>EMAIL ADDRESS</b>		
<b>RELATIONSHIP</b>		

## PART 4: SELF DECLARATION

I hereby declare that all of the information/documents provided to support this application are authentic, true and accurate. I fully understand the Terms and Conditions of the application and agree that my application will be rejected if I have falsified any information in any way.

Signature:

Name:

Date:

This application is subject to Terms and Conditions stated below

- Documents that are not in English or Bahasa Malaysia must be accompanied by a certified full translation.
- The Malaysian Qualifications Agency (MQA) is authorised by the applicant, to make references to and use the information or data in this application as may be deemed necessary.
- The certification applied for is designed to meet requirements set by the MQA. Admission to the Academic Programme applied for, using this APEL Certificate is subject to the Academic Regulations approved by the University/ College.
- Non-refundable application fee of **RM .....** is submitted. **Do not send cash.**

CHECK LIST		Yes		No		For Office Use	
Photocopy IC	<input type="checkbox"/>	<input type="checkbox"/>				Acknowledgment     Date	
Application Fee (Banker's Cheque/Draft No.....)	<input type="checkbox"/>	<input type="checkbox"/>					
1 recent passport size photographs	<input type="checkbox"/>	<input type="checkbox"/>					
Certified Certificates/Documents	<input type="checkbox"/>	<input type="checkbox"/>					
1 copy of application	<input type="checkbox"/>	<input type="checkbox"/>					

**Lampiran 3 : Senarai Pembuktian**  
**Appendix 3 : List of Evidence**

Direct Evidence	Indirect Evidence
<p><b>Certificates</b></p> <p>You can provide copies of your qualification</p> <ul style="list-style-type: none"> <li>• School certificates</li> <li>• Statement of results</li> <li>• Courses completed at work</li> </ul>	<p><b>Written Records</b></p> <p>You can provide copies of</p> <ul style="list-style-type: none"> <li>• Diaries</li> <li>• Records</li> <li>• Journals</li> <li>• Articles</li> </ul>
<p><b>Work samples</b></p> <p>You can provide samples of your work</p> <ul style="list-style-type: none"> <li>• Drawings or photographs</li> <li>• Reports</li> <li>• Written materials</li> <li>• Projects</li> <li>• Objects</li> <li>• Work of arts</li> </ul>	<p><b>Email</b></p> <p>You can provide copies of email communications which verify</p> <ul style="list-style-type: none"> <li>• Customer feedback</li> <li>• Work ctivities</li> <li>• Written skills</li> </ul>
<p><b>Records of workplace activities</b></p> <p>You can provide documents that verify your work activities</p> <ul style="list-style-type: none"> <li>• Notes</li> <li>• Emails</li> <li>• Completed worksheets</li> <li>• Workplace agreement</li> <li>• Contracts</li> </ul>	<p><b>Supporting letters</b></p> <p>You can provide letters to verify your claim from</p> <ul style="list-style-type: none"> <li>• Employers</li> <li>• Community group</li> <li>• People you have work with (paid and unpaid work)</li> </ul>
<p><b>Documents</b></p> <p>You can provide evidence that shows what you have done in your life</p> <ul style="list-style-type: none"> <li>• Media articles</li> <li>• Meritoriuos Awards</li> </ul>	

Z



## **Lampiran 4 : Senarai Kemahiran**

### **Appendix 4 : List of Skills**

List of skills on what learners have learnt based on the Malaysian Qualifications Framework (MQF) Learning Outcomes. There are five clusters of learning outcomes:

- a) Knowledge and understanding.
- b) Cognitive skills.  
Functional work skills with focuses on:
  - i. practical skills.
  - ii. interpersonal and communication skills.
  - iii. digital and numeracy skills.
  - iv. leadership, autonomy and responsibility.
- c) Personal and entrepreneurial skills.
- d) Ethics and professionalism.

**Below is a sample of the level of descriptors. Applicable to the appropriate level of Bachelor, Master and Doctorate.**

#### **1. Knowledge and understanding**

- Knowledge and understanding refer to a systematic understanding of facts, ideas, information, principles, concepts, theories, technical knowledge, regulations, numeracy, practical skills, tools to use, processes and systems.

#### **2. Cognitive skills**

- This relates to the thinking or intellectual capabilities and the ability to apply knowledge and skills. The capacity to develop levels of intellectual skills progressively begins from understanding, critical/creative thinking, assessment, applying, analysing, problem-solving and synthesizing to create new ideas, solutions, strategies or new practices. Such intellectual skills enable the learner to search for and comprehend new information from different fields of knowledge and practices.

## Functional work skills

### 3. Practical work skills

- These are generally work skills and operational skills applicable to a common employment environment, such as planning, organisational skills and selection of tools, material, technology methods and procedures. In the study context, it may include study skills and preparations, undertaking procedures, scientific skills, designs, research and so forth. It also includes specialised skills set by specific subject, discipline, technical or occupation-related work skills and professional practices which enhance professional competence. It should include safe and sustainable practices.

**4. Interpersonal skills** refer to a range of skills which, amongst others, include interactive communications, relationships and collaborative skills in managing relationships in teams and within the organisations, networking with people of different cultures, as well as social skills/etiquettes.

**5. Communication skills** refer generally to the ability to communicate/convey information/ideas/reports cogently and professionally in appropriate languages. The communication must be effective and in appropriate forms, in various mediums, and to a range of audiences and different situations. The ability to communicate in more than one language is encouraged.

**6. Digital skills** generally refer to the ability to use information/digital technologies to support work and studies. The skills include sourcing and storing information, processing data, using applications for problem-solving and communication, as well as ethics in applying digital skills.

**7. Numeracy skills** - the quantitative skills that require learners to acquire increasingly higher levels of numerical abilities. It is acknowledged as an important living skill relevant to study, work and daily life. Within the Malaysian Qualifications Framework levels, this learning outcome may not be specifically mentioned for every level, but it is expected that the requirement of numerical skills as an outcome ought to be indicated for every specific programme. It may include an understanding of basic mathematics, symbols relating to statistical techniques, etc.

## **8. Leadership, autonomy and responsibility**

- This cluster of skills refers to the ability of an individual to build relationships and work with teams made up of peers, as well as the capability of the individual in managerial capacities with varying degrees of autonomy to make decisions or set goals at organisational/unit/team levels. The individual is also expected to take responsibility and provide accountability, to be confident, knowledgeable, articulate, honest, professional, concerned and resilient, to be a risk taker and to possess other intrapersonal skills including working in and leading teams.

**9. Personal skills** are life skills that learners are expected to use daily. They are normally portrayed through enthusiasm for independent learning, intellectual and self-development, or by demonstrating confidence, self-control, social skills, proper etiquette and commitment to professionalism in the workplace. It also includes the capability to plan for career development or further education. Aspects of character, such as honesty, punctuality, time management, and keeping to and maintaining important deadlines in a work environment, are also important personal skills.

**10. Entrepreneurial skills** require relevant knowledge, skills and expertise in key areas of an enterprise. Important personal qualities will include creativity, grit/determination and drive. The learning outcomes describe incremental development of these skills. The drive to be an entrepreneur is set as personal skills but also requires the requisite of relevant knowledge, cognitive and functional skills.

## **11. Ethics and professionalism**

- Ethics and values are important in personal, organisational, societal/community and global settings as they guide personal actions and interactions at work and within the community at large. Awareness/understanding and respect of ethical, social and cultural differences and issues are important in the exercise of professional skills and responsibilities comprising integrity, professional conduct (professionalism) and standards of conduct (e.g., upholding regulations, laws and codes of good practices or code of professional conduct). A sensitive approach in dealings with other cultures adds value to this learning domain.