



# BORANG PERMOHONAN GERAN PADANAN IN-PUTRA

## A. MAKLUMAT PERMOHONAN GERAN PENYELIDIKAN *Application Details*

**1. Tajuk penyelidikan yang dicadangkan:**  
*Title of Proposed Research Project:*

## B. MAKLUMAT KETUA PROJEK/PENYELIA PELAJAR *Details Of Project Leader*

Sila lampirkan C.V. ketua projek mengikut format yang disediakan  
*Please attach C.V. of project leader/supervisor according to the following format)*

**1. Nama Ketua Projek/Penyelia:**  
*Name of Project Leader/Supervisor*

**2. No. Mykad/Passport:**  
*Mykad no./Passport*

**3. No. staf:**  
*Staff no.*

**4. Jawatan (Sila tanda):**  
*Position (Please tick)*

|                                                       |                                                                                    |                                                                    |
|-------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <input type="checkbox"/> Profesor<br><i>Professor</i> | <input type="checkbox"/> Profesor Madya<br><i>Associate Professor</i>              | <input type="checkbox"/> Pensyarah Kanan<br><i>Senior Lecturer</i> |
| <input type="checkbox"/> Pensyarah<br><i>Lecturer</i> | <input type="checkbox"/> Lain-lain (sila nyatakan)<br><i>Others (Please state)</i> |                                                                    |

**5. PTJ Faculty / Institute:**

**6. No. telefon pejabat:**  
*Office telephone no.*

**7. No. telefon bimbit:**  
*Mobile phone no.*

**8. Alamat e-mel:**  
*E-mail address*

**9. Status perkhidmatan:**  
*Status of service*

|                                          |                                                                                                             |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Tetap Permanent | <input type="checkbox"/> Kontrak<br><i>Contract</i><br>Tarikh tamat kontrak:<br><i>Contract expiry date</i> |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------|

**10. Tarikh lantikan jawatan sekarang:**  
*Date of appointment*

**C. MAKLUMAT SYARIKAT SWASTA/PIHAK ANTARABANGSA/INSTITUT PENGAJIAN TINGGI/PUSAT PENYELIDIKAN** *Details of Private Company/International Party/High Education Institute/Research Center*

Sila lampirkan salinan Carian SSM terkini (Maklumat Korporat daripada [www.ssm-einfo.my](http://www.ssm-einfo.my)) (untuk syarikat Swasta di Malaysia sahaja).

*Please attach a copy of the latest SSM Search (Corporat Information from [www.ssm-einfo.my](http://www.ssm-einfo.my)) (for Private companies in Malaysia only).*

|                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                          |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|--|
| <b>1. Nama Syarikat Swasta/Pihak Antarabangsa/Institut Pengajian Tinggi/Pusat Penyelidikan</b><br><i>Name of Private Company/International Party/High Education Institute/Research Center</i>                                                                                                                                                                                                       |  |                                                          |  |
| <b>2. Nama Wakil Syarikat / Penyelidik Bersama</b><br><i>Name of Company Representative / Co-Researcher</i>                                                                                                                                                                                                                                                                                         |  |                                                          |  |
| <b>3. Jawatan</b><br><i>Position</i>                                                                                                                                                                                                                                                                                                                                                                |  |                                                          |  |
| <b>4. Bidang Agensi/ Perniagaan</b><br><i>Agency/Business Area</i>                                                                                                                                                                                                                                                                                                                                  |  |                                                          |  |
| <b>5. Alamat</b> <i>Address</i>                                                                                                                                                                                                                                                                                                                                                                     |  |                                                          |  |
| <b>6. No. telefon pejabat:</b><br><i>Office telephone no.</i>                                                                                                                                                                                                                                                                                                                                       |  | <b>7. No. telefon bimbit:</b><br><i>Mobile phone no.</i> |  |
| <b>8. Alamat e-mel:</b><br><i>E-mail address</i>                                                                                                                                                                                                                                                                                                                                                    |  |                                                          |  |
| <b>9. Jumlah Sumbangan Tunai (RM) untuk Projek Penyelidikan</b><br><i>Total Cash contribution for the Project</i>                                                                                                                                                                                                                                                                                   |  |                                                          |  |
| <b>10. Adakah Agensi/Syarikat Swasta/Pihak Antarabangsa menjalankan aktiviti perniagaan yang melibatkan tembakau, senjata api, dadah, elemen perjudian atau yang bercanggah dengan Undang-Undang Malaysia?</b><br><i>Does the Agency/Private Company/International Party carry out business activities involving tobacco, firearms, drugs, gambling elements or that are against Malaysian Law?</i> |  |                                                          |  |
| <input type="checkbox"/> <b>Ya</b><br><i>Yes</i>                                                                                                                                                                                                                                                                                                                                                    |  | <input type="checkbox"/> <b>Tidak</b><br><i>No</i>       |  |
| <b>Jika Ya, sila nyatakan jenis aktiviti perniagaan yang terlibat:</b><br><i>If Yes, please state the type of business activity involved:</i>                                                                                                                                                                                                                                                       |  |                                                          |  |

|  |
|--|
|  |
|--|

**D. PROGRAM PENYELIDIKAN UDRP** *Research Program*

|                                                                |                                                     |                     |                          |                      |
|----------------------------------------------------------------|-----------------------------------------------------|---------------------|--------------------------|----------------------|
| <b>1. Nama Program Penyelidikan</b><br><i>Research Program</i> | *mohon nyatakan nama program berdasarkan UDRP rasmi |                     |                          |                      |
| <b>2. PTJ Peneraju</b><br><i>Lead PTJ</i>                      |                                                     |                     |                          |                      |
| <b>3. Status Penyelidik</b><br><i>Researcher Status</i>        | <input type="checkbox"/>                            | Penyelidik Institut | <input type="checkbox"/> | Penyelidik Bersekutu |
|                                                                | <input type="checkbox"/>                            | Penyelidik Fakulti  |                          |                      |

**E. MAKLUMAT PENYELIDIKAN** *Research Information*

|                                                                                                                                                                                                                                                                                                                          |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>1. Kluster</b> <i>Cluster</i>                                                                                                                                                                                                                                                                                         |  |
| <b>2. Tempoh Penyelidikan</b><br><i>Duration of research</i>                                                                                                                                                                                                                                                             |  |
| <b>3. Tarikh Mula</b><br><i>Start date</i>                                                                                                                                                                                                                                                                               |  |
| <b>4. Tarikh Tamat</b><br><i>End date</i>                                                                                                                                                                                                                                                                                |  |
| <b>5. Tempat penyelidikan dijalankan</b><br><i>Location of research</i>                                                                                                                                                                                                                                                  |  |
| <b>7. Penyelidik lain yang terlibat dalam projek (termasuk pelajar pasca siswazah):</b> *(Sila lampirkan C.V. setiap penyelidik mengikut format yang disediakan)<br><i>Other researchers involved in the project (including post-graduate):</i> *(Please attach CV of each researchers according to the format provided) |  |

| Bil.<br>No. | Nama / Jawatan<br>Name / Position | No Staf / No matrik<br>Staff ID / Matric Number | Institusi / PTJ<br>Institution | Kelayakan akademik/<br>Pelantikan/<br>Bidang pengajian<br>Academic qualifications/<br>Designation/Field of study | Tanda tangan<br>Signature |
|-------------|-----------------------------------|-------------------------------------------------|--------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------|
| 1.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 2.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 3.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 4.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 5.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 6.          |                                   |                                                 |                                |                                                                                                                  |                           |
| 7.          |                                   |                                                 |                                |                                                                                                                  |                           |

## F. RINGKASAN CADANGAN EKSEKUTIF PENYELIDIKAN *Executive Summary Of Research Proposal*

Rumusan latar belakang penyelidikan, kajian literatur, kaedah penyelidikan, objektif dan jangkaan hasil penyelidikan) - maksimum 300 patah perkataan

*Summary of research background, literature review, objectives, research methodology and expected outcomes from the research project) - maximum 300 words*

## G. PERINCIAN CADANGAN MAKLUMAT PENYELIDIKAN *DETAILED PROPOSAL OF RESEARCH PROJECT*

### 1. Latar belakang penyelidikan termasuk hipotesis/persoalan penyelidikan dan kajian literatur

*Research background including hypothesis /research questions and literature review*

### 2. Penyelidikan lepas yang berkaitan (sila lampirkan sekiranya perlu)

*Past relevant research (please attach, if necessary)*

| Tajuk penyelidikan<br><i>Title of research</i> | Nama Geran<br><i>Name of grant</i> | Jawatan / Peranan<br><i>Position / Role</i> | Tempoh<br><i>Duration</i> | Tarikh mula<br><i>Start date</i> | Tarikh tamat<br><i>End date</i> |
|------------------------------------------------|------------------------------------|---------------------------------------------|---------------------------|----------------------------------|---------------------------------|
|                                                |                                    |                                             |                           |                                  |                                 |
|                                                |                                    |                                             |                           |                                  |                                 |
|                                                |                                    |                                             |                           |                                  |                                 |

### 3. Objektif penyelidikan

*Research objective(s)*

#### 4. Kaedah penyelidikan

*Research methodology*

Sila nyatakan dan huraikan; *Please state in the;*

- a. Huraian Kaedah  
*Description of methodology*

- b. Milestones dan tarikh

*Milestones and dates*

| No. | Carta Perbatuan<br><i>Milestone</i> | Pihak yang Terlibat<br><i>Party involved</i> | Tarikh Tamat<br>Milestone<br><i>Milestone completion<br/>date</i> | Peruntukan<br><i>Allocation (RM)</i> |
|-----|-------------------------------------|----------------------------------------------|-------------------------------------------------------------------|--------------------------------------|
| 1.  |                                     |                                              |                                                                   |                                      |
| 2.  |                                     |                                              |                                                                   |                                      |
| 3.  |                                     |                                              |                                                                   |                                      |
| 4.  |                                     |                                              |                                                                   |                                      |
| 5.  |                                     |                                              |                                                                   |                                      |

- c. Carta alir aktiviti penyelidikan (Sila sertakan di dalam Lampiran)  
*Flow chart of research activities (Please enclose in the appendix)*
- d. Carta Gantt aktiviti penyelidikan (Sila sertakan di dalam Lampiran)  
*Gantt chart of research activities (Please enclose in the appendix)*

#### H. JANGKAAN HASIL/FAEDAH *Expected Results/Benefit*

1. Penerbitan penyelidikan (Sila nyatakan jangkaan tarikh penerbitan dalam jurnal)  
*Research publications (Please state the expected date of publication in journals)*
2. Teori novel/Penemuan baru/Pengetahuan/Ciptaan/Inovasi  
*Novel theories/New findings/Knowledge/Invention/Innovation*

**3. Penggunaan khusus atau potensi**

*Specific or potential applications*

**4. Bilangan pelajar Master dan Ph.D (melalui penyelidikan) – Jika ada**

*Number of Ph.D and Masters (by research) that will be produced – If any*

**I. CADANGAN JANGKA PANJANG FUTURE PLANNING**

**J. BELANJAWAN** *BUDGET*

Sila anggarkan belanjawan untuk penyelidikan ini dan butiran perbelanjaan dengan merujuk kepada garis panduan yang telah dilampirkan.

*Please indicate the estimated budget for the research and details of expenditure according to the guidelines attached.*

| Butiran belanjawan<br><i>Budget details</i>                                                                                                                                                           | Jumlah yang diminta oleh pemohon<br><i>Amount requested by applicant</i> |                    |                          |                    |                          |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------|--------------------------|--------------------|--------------------------|--------------------|
|                                                                                                                                                                                                       | Tahun 1<br><i>Year 1</i>                                                 |                    | Tahun 2<br><i>Year 2</i> |                    | Tahun 3<br><i>Year 3</i> |                    |
|                                                                                                                                                                                                       | UPM<br>(RM)                                                              | PIHAK LUAR<br>(RM) | UPM<br>(RM)              | PIHAK LUAR<br>(RM) | UPM<br>(RM)              | PIHAK LUAR<br>(RM) |
| 1. <b>Vote 11000</b><br>Gaji dan upahan<br><i>Salary and Wages</i>                                                                                                                                    |                                                                          |                    |                          |                    |                          |                    |
| 2. <b>Vote 21000</b><br>Perbelanjaan perjalanan dan pengangkutan<br><i>Travel expenses and transportation</i>                                                                                         |                                                                          |                    |                          |                    |                          |                    |
| 3. <b>Vote 24000</b><br>Sewaan <i>Rental</i>                                                                                                                                                          |                                                                          |                    |                          |                    |                          |                    |
| 4. <b>Vote 27000</b><br>Bekalan bahan penyelidikan serta bekalan bahan mentah dan bahan-bahan untuk penyenggaraan dan pembaikan<br><i>Research materials and materials for repair and maintenance</i> |                                                                          |                    |                          |                    |                          |                    |
| 5. <b>Vote 28000</b><br>Penyelenggaraan dan pembaikan kecil                                                                                                                                           |                                                                          |                    |                          |                    |                          |                    |

|                                                                                                                                                                                                                                                                                |                                                                          |                                                   |                          |                    |                          |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------|--------------------------|--------------------|--------------------------|--------------------|
| Maintenance and minor repair services                                                                                                                                                                                                                                          |                                                                          |                                                   |                          |                    |                          |                    |
| Butiran belanjawan<br><i>Budget details</i>                                                                                                                                                                                                                                    | Jumlah yang diminta oleh pemohon<br><i>Amount requested by applicant</i> |                                                   |                          |                    |                          |                    |
|                                                                                                                                                                                                                                                                                | Tahun 1<br><i>Year 1</i>                                                 |                                                   | Tahun 2<br><i>Year 2</i> |                    | Tahun 3<br><i>Year 3</i> |                    |
|                                                                                                                                                                                                                                                                                | UPM<br>(RM)                                                              | PIHAK LUAR<br>(RM)                                | UPM<br>(RM)              | PIHAK LUAR<br>(RM) | UPM<br>(RM)              | PIHAK LUAR<br>(RM) |
| <b>6. Vote 29000</b><br>Perkhidmatan profesional, hospitaliti, duti setem LHDN (maksimum 0.5% daripada jumlah belanjawan penyelidikan dan lain-lain<br><i>Professional services, hospitality, duty stamps of LHDN (maximum 0.5% from total of research and other services)</i> |                                                                          | Duti setem: RM<br><br>Caj Perkhidmatan (5%)<br>RM |                          |                    |                          |                    |
| <b>Vote 35000</b><br>Peralatan dan aksesori (Sila rujuk garis panduan untuk keterangan lanjut)<br><i>Equipment and accessories (Please refer to guidelines for more information)</i>                                                                                           |                                                                          |                                                   |                          |                    |                          |                    |
| <b>Bajet tahunan yang dicadangkan</b><br><i>Proposed yearly budget</i>                                                                                                                                                                                                         |                                                                          |                                                   |                          |                    |                          |                    |
| <b>JUMLAH KESELURUHAN</b><br><i>Total Amount</i>                                                                                                                                                                                                                               |                                                                          |                                                   |                          |                    |                          |                    |



**I. AKUAN PEMOHON** *DECLARATION BY APPLICANT*

**Saya dengan ini mengaku bahawa:**

*I hereby declare:*

**Semua maklumat yang diberi adalah benar. Penaja berhak menolak permohonan atau membatalkan tawaran pada bila-bila masa sekiranya keterangan yang dikemukakan adalah tidak benar.**

*All information stated herein are true. The funder has the right to reject or withdraw the offer without prior notice if there is any inaccurate information given.*

**Tarikh :**

*Date :*

**Tandatangan pemohon :**

*Applicant's signature :*

**Nota** *Notes:*

1. C.V. penyelidik-penyelidik hendaklah mengandungi maklumat berkaitan dengan penyelidikan contohnya senarai projek yang sedang dilaksanakan dan tamat, agensi-agensi yang membiayai, jumlah dana diterima, senarai penerbitan, senarai penuntut ijazah lanjutan yang telah menamatkan pengajian dan hasil-hasil penyelidikan lain.

*The C.V. of researchers should contain information relevant to research e.g. list of completed and ongoing projects, funding agencies, amount of funding received, list of publications, list of post-graduate students graduated, and other research output.*

## Contoh: Carta Gantt Aktiviti Penyelidikan, Milestone dan Tarikh

Example: Gantt Chart of Research Activities, Milestones and Dates

### Tajuk penyelidikan dicadangkan:

Title of proposed research:

| Year                                                   | 2011 |   |   |   |   |   |   |   |   |   |   |   | 2012 |   |   |   |   |   |   |   |   |   |   |   | 2012   |        | 2013   |        |
|--------------------------------------------------------|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|--------|--------|--------|--------|
| Project activities                                     | J    | F | M | A | M | J | J | A | S | O | N | D | J    | F | M | A | M | J | J | A | S | O | N | D | S<br>1 | S<br>2 | S<br>1 | S<br>2 |
| 1. Project implementation plan write up                |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 2. Hyper-spectral data airborne mission                |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 3. Satellite data acquisition (new tasking)            |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 4. Field data collection & compilation                 |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 5. Data processing and analysis bio-D characterization |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 6. Development of Bio-change detection algorithm       |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 7. Development of DST                                  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 8. Organize workshop                                   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 9. Final report                                        |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| Year                                                   | 2011 |   |   |   |   |   |   |   |   |   |   |   | 2012 |   |   |   |   |   |   |   |   |   |   |   | 2012   |        | 2013   |        |
| Project (Milestone)                                    | J    | F | M | A | M | J | J | A | S | O | N | D | J    | F | M | A | M | J | J | A | S | O | N | D | S<br>1 | S<br>2 | S<br>1 | S<br>2 |
| 1. Complete BIO-D Characterization                     |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 2. Complete Bio-Change Algorithm                       |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 3. Complete DST development                            |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 4. Complete Seminar                                    |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 5. Complete project report                             |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |
| 6. Project completion                                  |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |        |        |        |        |

Nota: Tempoh maksimum lanjutan projek ialah selama 6 bulan (S1) dan tambahan lagi enam bulan (S2)

Maximum duration of project extension is up to six months (S1) and followed up by another six months (S2).

