1. **PEMOHON (PENYELIDIK UTAMA)**

***APPLICANT (LEAD RESEARCHER)***

|  |  |  |
| --- | --- | --- |
| A. | NAMA*NAME* |  |
| B. | UKM PER***ID NO.*** |  |
| C. | FAKULTI/INSTITUT*FACULTY/INSTITUTE* |  |
| D. | EMEL & NO. TEL BIMBIT*EMAIL & NO. MOBILE* |  |

1. **PROJEK PENYELIDIKAN**

*RESEARCH PROJECT*

|  |  |  |
| --- | --- | --- |
| A. | TAJUK*TITLE* |  |
| B | NO GERAN*GRANT NO.* |  |
| C. | NO. KELULUSAN UKMAEC LEPAS*PREVIOUS NO. UKMAEC APPROVAL*  |  |
| D. | INSTITUSI PEMBIAYA DANA*FUNDING INSTITUTION* |  |
| E. | TEMPOH KAJIAN*DURATION OF STUDY* | MULA *START* | (Bulan/*Month*) | (Tahun/*Year*) |
| TAMAT*END* | (Bulan/*Month*) | (Tahun/*Year*) |

1. **PENYELIDIK BERSAMA DAN KAKITANGAN YANG TERLIBAT (termasuk kakitangan makmal)**

 ***CO-RESEARCHERS AND STAFFS INVOLVED (including laboratory staffs)***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bil.*****No.*** | **Nama dan Alamat*****Name and Address*** | **Kelayakan** ***Qualification*** | **Jawatan*****Position*** | **Telefon & Emel*****Telephone &Email*** |
| 1. |  |  |  |  |
| 2. |  |  |  |  |
| 3. |  |  |  |  |
| 4. |  |  |  |  |
| 5. |  |  |  |  |

1. **PELAJAR**

***STUDENTS***

|  |  |  |  |
| --- | --- | --- | --- |
| **Bil.*****No.*** | **Nama dan Alamat*****Name and Address*** | **Program*****Program*** | **Telefon & Emel*****Telephone &Email*** |
| 1. |  |[ ]  Prasiswasah*Undergraduate* |  |
|  |  |[ ]  Pascasiswazah*Postgraduate* |  |
| 2. |  |[ ]  Prasiswasah*Undergraduate* |  |
|  |  |[ ]  Pascasiswazah*Postgraduate* |  |
| 3. |  |[ ]  Prasiswasah*Undergraduate* |  |
|  |  |[ ]  Pascasiswazah*Postgraduate* |  |
| 4. |  |[ ]  Prasiswasah*Undergraduate* |  |
|  |  |[ ]  Pascasiswazah*Postgraduate* |  |
| 5. |  |[ ]  Prasiswasah*Undergraduate* |  |
|  |  |[ ]  Pascasiswazah*Postgraduate* |  |

**BAHAGIAN 1: GAMBARAN MENYELURUH KAJIAN**

***SECTION 1: OVERVIEW OF STUDY***

|  |  |
| --- | --- |
| **1.1** | **Latar belakang ringkas dan kewajaran projek (untuk dikelaskan kategori 2) (Tidak melebihi 300 perkataan)*****Brief background and justification of study (to be classified under Category 2) (Not more than 300 words)*** |
|  |  |

|  |  |
| --- | --- |
| **1.2** | **Adakah kajian yang serupa sedang/pernah dijalankan oleh penyelidik atau penyelidik lain?****(Jika ya, sila berikan butiran dengan kata kunci (maksimum 3 penerbitan penuh) perlu dikemukakan bersama-sama borang permohonan)*****Have similar studies been undertaken by you or others currently /previously?******(If yes, give details with key references (maximum of 3 full publications) must be submitted together with the application form)*** |
|  |  |
| **1.3** | **Matlamat kajian (Senaraikan matlamat umum dan khusus)*****Study objectives (List general and specific objectives)*** |
|  |  |
| **1.4** | **Hipotesis kajian** ***Study hypothesis*** |
|  |  |

|  |  |
| --- | --- |
| **1.5** | **Berikan ringkasan rekabentuk kajian menggunakan CARTA ALIR (Sila masukkan kumpulan, spesies, bilangan dan umur haiwan yang digunakan, kaedah, tempoh kajian dan parameter-parameter kajian).*****Provide a summary of the study design using a FLOWCHART. (Please include the, study parameters) groupings, species, number and age of animal used, methodology, duration of experiments*** |
|  |

|  |  |
| --- | --- |
| **1.6** | **Kewajaran penggunaan haiwan.*****Justification of using animals*** |
|  |  |
| **1.7** | **Potensi manfaat kajian.** ***Potential benefits of study*.** |
|  |[ ]  Meningkatkan kefahaman mengenai kesihatan haiwan/manusia*Increasing understanding of animal / human health* |
|  |[ ]  *Pengekalan/penambahbaikan kesihatan haiwan/manusia**Maintaining / improving animal / human health* |
|  |[ ]  Penambahbaikan pengurusan haiwan*Improving animal management* |
|  |[ ]  Lain-lain (sila nyatakan):*Others (please specify):* |  |

**BAHAGIAN 2: MAKLUMAT HAIWAN KAJIAN**

***SECTION 2: INFORMATION ON EXPERIMENTAL ANIMALS***

|  |  |
| --- | --- |
| **2.1** | **Jenis haiwan.*****Types of animals.*** |
|  |[ ]  Tikus*Rats* |[ ]  Mencit*Mice* |[ ]  Hamster*Hamster* |
|  |[ ]  Zebrafish*Zebrafish* |[ ]  Argus*Guinea pigs* |[ ]  Arnab*Rabbits* |
|  |[ ]  Biri-biri*Sheeps* |[ ]  Kambing*Goats* |[ ]  Primat bukan manusia*Non-human primates* |
|  |[ ]  Lain-lain (sila nyatakan):*Others (please specify):* |  |
| **2.2** | Adakah sebarang permit diperlukan untuk menangkap, mengguna, memusnah atau melepaskan haiwan yang dilindungi atau haiwan transgenik?Jika ya, sila sertakan dokumen berkenaan.*Is there any permit that must be obtained for the capture, used, destruction or release of protected or transgenic animals?**If yes, please provide the necessary document(s).*  | [ ]  PERHILITAN/*Wildlife* |
|  |  | [ ]  PERIKANAN/*FISHERY* |
|  |  | [ ]  UKM-IBC/*UKM-IBC* |
| **2.3** | **Spesies/Strain*****Species/Strain*** |  |
| **2.4** | **Umur/Berat*****Age/Weight*** |  |
| **2.5** | **Bilangan haiwan*****Number of animals*** |
|  |  | Jantan*Male* | Betina*Female* | Jumlah *Total* |
|  | Kumpulan kawalan*Control group* |  |  |  |
|  | Kumpulan kajian*Tested group* |  |  |  |
|  | Jumlah*Total* |  |  |  |
| **2.6** | **Sumber haiwan***Source of animals* |
|  |[ ]  Unit Sumber Haiwan Makmal, Fakulti Perubatan, UKM*Laboratory Animal Resource Unit, Faculty of Medicine, UKM* |
|  |[ ]  Institusi tempatan lain (Sila nyatakan)*Other local institution (Please specify)* |  |
|  |[ ]  Diimport*Imported* |
|  |  | Syarikat sendiri atau pengimport*Own or importing company* |  |
|  |  | Negara asal*Country of origin* |  |
|  |  | Kemudahan biakbaka*Breeding facility* |  |
| **SILA SERTAKAN SALINAN SIJIL KESIHATAN DAN PERMIT IMPORT APABILA MENDAPAT KELULUSAN.*****PLEASE SUBMIT A COPY OF HEALTH CERTIFICATE AND THE IMPORT PERMIT UPON APPROVAL.*** |

**BAHAGIAN 3: TATACARA DALAM HAIWAN**

***SECTION 3: PROCEDURES IN ANIMALS***

Sila tandakan [√ ] dalam kotak yang bersesuaian. Biarkan kosong jika tidak berkaitan.

*Please tick [√ ] in the necessary boxes. Leave blank if applicable.*

|  |  |
| --- | --- |
| **3.1** | **Tatacara bukan pembedahan*****Non-surgical procedures*** |
|  | 3.1.1 | Tatacara (Nyatakan dengan terperinci)*Procedures (Specify in detail)* |
|  |  |[ ]  Pendarahan haiwan*Bleeding of animal* |  |
|  |  |  | Isipadu darah*Volume of blood* |  |
|  |  |  | Kekerapan pendarahan*Frequency of bleeding* |  |
|  |  |  | Cara pendarahan*Route of bleeding* |  |
|  |  |[ ]  Biopsi*Biopsy* |  |
|  |  |  | Jenis*Type* |  |
|  |  |  | Saiz sampel biopsi*Size of biopsy sample* |  |
|  |  |  | Kekerapan*Frequency* |  |
|  |  |[ ]  Lain-lain (Sila lihat Bahagian 3.4 )*Others (Please see Section 3.4)* |  |
|  | 3.1.2 | Kaedah mengekang haiwan (Nyatakan)*Method of animal restraint (Specify)* |
|  |  |[ ]  Manual*Manual* |  |
|  |  |[ ]  Mekanikal*Mechanical* |  |
|  |  |[ ]  Kimia*Chemical* |  |
|  |  |[ ]  Dadah*Drug* |  |
|  |  |  |  | Dos*Dose* |  |
|  |  |  |  | Cara administrasi*Route of administration* |  |
|  |  |[ ]  Lain-lain (Nyatakan)*Others (Specify)* |  |
|  | 3.1.3 | Kaedah mematikan haiwan secara perikemanusian. *Method of humane killing.*  |
|  |  |[x]  Dislokasi tulang servikal*Cervical dislocation* |
|  |  |[ ]  Pemenggalan leher*Decapitation* |
|  |  |[ ]  Kebuk CO2*CO2 chamber* |
|  |  |[ ]  Dos lewah dadah (Nyatakan)*Drug overdose (Specify)* |
|  |  |  |  | Dadah*Drug* |  |
|  |  |  |  | Dos*Dose* |  |
|  |  |  |  | Cara administrasi*Route of administration* |  |
|  |  |[ ]  Lain-lain (Nyatakan)*Others (Specify)* |  |
|  | 3.1.4 | Terangkan bagaimana pelupusan sisa dan haiwan dilakukan. (Sila gunakan kertas berasingan).*Describe the disposal of the used animals and waste.* *(Please write in separate sheet).* |
| **3.2** | **Tatacara pilihan.*****Alternative procedure.*** |
|  | 3.2.1 | Adakah tatacara pilihan telah dikenalpasti?*Has alternatives to the procedures to the animals been searched for?* |
|  |  |[ ]  Ya*Yes* |[ ]  Tidak*No* |
|  | 3.2.2 | Jika ya, sila sertakan bukti yang menyokong pernyataan anda (laman sesawang, jurnal, dll.)*If yes, please provide evidence/reference to support your claim. (websites, journals etc*) |
|  |  |
| **3.4** | Untuk penggunaan bahan toksik atau organisma patogen surat kelulusan Jawatankuasa Keinstitusian Biokeselematan UKM harus dikemukakan.*On the use of toxic materials as well as pathogenic organism, an approval letter from the UKM Institutional Biosafety Committee should be provided.* |
|  |[ ]  Dikemukakan*Attached* |[ ]  Tidak berkenaan*Not applicable* |

**BAHAGIAN 4: PENGELASAN PROJEK**

***SECTION 4: PROJECT CLASSIFICATION***

|  |  |
| --- | --- |
| **4.1** | **Pengelasan Projek*****Project Classification*** |
|  |[ ]  A | Projek yang memerlukan haiwan dimatikan untuk pengambilan seluruh haiwan atau sebahagian tisu tanpa ujikaji dijalankan.*Projects requiring animals to be killed for the preparation of whole animal or tissue specimens without prior experimentation.* |
|  |[ ]  B | Projek yang menggunakan sampel haiwan sedia ada daripada projek terdahulu.*Projects that use readily animal samples obtained from a previous project.* |

**BAHAGIAN 5: PERAKUAN DAN KELULUSAN**

***SECTION 5: ENDORSEMENT AND APPROVAL***

|  |  |
| --- | --- |
| **5.1** | **PERAKUAN PENYELIDIK/PEMOHON*****RESEARCHER/APPLICANT ENDORSEMENT*** |
|  | .........................................................Tandatangan & Cop Ketua Penyelidik *Signature & Stamp of Lead Researcher* | ………………………………………...........Tarikh*Date*  |
| **5.2** | **PERAKUAN KETUA JABATAN** ***HEAD OF DEPARTMENT ENDORSEMENT*** |
|  | .........................................................Tandatangan & Cop Ketua Jabatan *Signature & Stamp of Head of Department* | ………………………………………...........Tarikh*Date*  |
| **5.3** | **KEPUTUSAN JAWATANKUASA ETIKA HAIWAN UKM (UKMAEC)*****DECISION OF UKM ANIMAL ETHICS COMMITTEE (UKMAEC)***…………………………………………………………………………………………………………………………………………........…………………………………………………………………………………………………………………………………………......…………………………………………………………………………………………………………………………………………......…………………………………………………………………………………………………………………………………………......…………………………………………………………………………………………………………………………………………...... |
| **5.4** | **NO. KOD KELULUSAN*****NO. APPROVAL CODE***  |
|  |  |
|  | .........................................................Tandatangan & Cop Sekretariat UKMAEC *Signature & Stamp of UKMAEC Secretariat* | ………………………………………...........Tarikh*Date*  |

|  |  |  |
| --- | --- | --- |
|  | .........................................................Tandatangan & Cop Pengerusi UKMAEC *Signature & Stamp of UKMAEC Chairperson* | ………………………………………...........Tarikh*Date*  |