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***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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.*

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| **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.* | | | | | | | | | | | |
|  |  | |  | 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* |