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|  |  | **BORANG T-ARGS/A1** |
|  | **Kod Rujukan:****(Diisi oleh PPI)** |
| **JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI****KEMENTERIAN PENDIDIKAN MALAYSIA**TVETRESEARCH GRANT SCHEME*SKIM GERAN PENYELIDIKAN TVET* (T-ARGS)APPLICATION FORMBORANG PERMOHONAN*(****1/2019****)**One (1) copy of this form must be submitted to the Centre of Research and Innovation, Department of Polytechnic and Community College Education, Level 3, Galeria PjH, Jalan P4W, Persiaran Perdana, Presint 4, 62100 Putrajaya.**[Incomplete Form will be rejected]* |
| **TYPE OF GRANT (Please tick √)** |
| * Skim Penyelidikan Prototaip Pensyarah Muda (SPPPM)
 |  |
| * Prototype Research (PRGS)
 |  |
| * Transdiciplinary Research (TRGS)
 |  |
| * Long-term Research (LRGS)
 |  |
| **DURATION OF THIS RESEARCH:***Tempoh masa penyelidikan:* |
| *Short Term Grant**(6 – 12 months)* |  | *Long Term Grant**(12 -24 months)* |  |
| **From: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** *Dari*  **To: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  *Hingga* **\**FOR PRGS AND TRGS ONLY*** | **From: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** *Dari*  **To: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  *Hingga*  |
| **A** | **TITLE OF PROPOSED RESEARCH:***Tajuk penyelidikan yang dicadangkan:* |
| **B** | **DETAILS OF RESEARCHER** / *MAKLUMAT PENYELIDIK*  |
| **B(i)** | Name of Project Leader: IC Number:*Nama Ketua Projek:* *No. Kad Pengenalan:*  |
| **B(ii)** | **Position (Please tick** *( √ )***):***Jawatan (Sila tanda ( √ )*)*:*  **Principal Lecturer** **Senior Lecturer**  **Lecturer**  *Pensyarah Utama* *Pensyarah Kanan* *Pensyarah*    |
| **B(iii)** | **Institution & Department (Please provide full address):***Institusi & Jabatan (Sila nyatakan alamat penuh):*   |
| **B(iv)** | **Office Telephone No.:** **Handphone No.:***No. Telefon Pejabat: No. Telefon Bimbit:*   |
| **B(v)** |  **E-mail Address:***Alamat e-mel:* |
| **B(vi)** | **Date of first appointment with this institution:***Tarikh mula berkhidmat dengan institusi ini****:*** |
| **C** | **RESEARCH INFORMATION /** MAKLUMAT PENYELIDIKAN |
| **C(i)** | **Research Cluster (Please tick** *( √ )):**Kluster Penyelidikan (Sila tanda ( √ )):*  |
|  | Engineering and Technology *(Kejuruteraan dan Teknologi)** Civil & Structural, Mechanical & Manufacturing, Electrical & Electronic, Materials, Transportation, Energy, Building System, Agriculture, Built Environment, Chemical & Petroleum, Biotechnology,
 |
|  | Information & Communication Technology *(Teknologi Komunikasi dan Informasi)** Software, Hardware, IOT, Computer Network, Information System
 |
|  | Social Sciences *(Sains Social)** Management, Education, Sociology, Business, Communication, Economic, Psychology
 |
|  | Arts and Applied Sciences *(Seni dan Sains Gunaan)** Visual Communication, Multimedia, Language & Linguistic, Policies & Law
 |
|  | Natural and Cultural Heritage (Alam dan Warisan Seni Budaya)* Tourism, Culinary, Heritage, Architecture, Landscape
 |
|  |
| **C(ii)** | **Research Priority Area** **(Please tick** *(* ***√ ). You can tick more than one.****Bidang Keutamaan Kajian (Sila tanda ( √ ). Anda boleh tanda lebih daripada satu.* |
|  | Professional TVET |
|  | Social Wellbeing |
|  | Innovative System |
| **C(iii)** |  **Location of Research:***Lokasi penyelidikan:*(Example / *Contoh* ) : CNC Lab, Politeknik Sultan Mizan Zainal Abidin, Dungun, Terengganu. |
| **C(iv)** | **List of Researchers:***Ahli-ahli penyelidik:**(Please include maximum 5 pages of curriculum vitae for each researcher)* |
| **Bil** | **Name***Nama* | **IC :***No. Kad Pengenalan:* | *Politeknik / Kolej Komuniti / Industri / Institusi Pendidikan* | **Academic Qualification/****Designation***Tahap Kelayakan Akademik/Jawatan* |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| **C(v)** | **Please provide information on academic publications that has been published by the project leader / researchers (if any) for the last five (5) years. (Example: Journals, Books, Chapters in books, etc)***Sila kemukakan maklumat berkaitan penerbitan akademik yang telah diterbitkan oleh ketua penyelidik / penyelidik (****jika ada****) dalam tempoh lima (5) tahun terakhir. (Contoh: Jurnal, buku, bab dalam buku, dll)* |
| **Title of publication***Tajuk penerbitan* | **Name of journals/books***Nama jurnal/buku* | **Year published***Tahun diterbitkan* |
|  | *Contoh: Politeknik & Kolej Komuniti Journal of Engineering and Technology* |  |
|  |  |  |
|  |  |  |
| **C(vi)** | **Executive Summary of Research Proposal (maximum 400 words)** *Ringkasan Cadangan Eksekutif Penyelidikan (maksimum 400 patah perkataan)***Should address the following:***Perlu nyatakan perkara seperti berikut:* **A. State the current scenario.** *Nyatakan senario semasa.* **B. What is wrong with the current scenario / issue? State the solution.** *Nyatakan apakah masalah dengan senario semasa / isu ?Nyatakan kaedah penyelesaian.* **C. State the rationale and significance of the project.** *Nyatakan rasional dan signifikasi projek.* **D. Describe the working principle behind the solution.** *Huraikan prinsip kerja bagi penyelesaian tersebut.* **E. Why is your solution product / prototype better than your competitors?** *Huraikan mengapa penyelesaian produk / prototaip anda lebih baik daripada pesaing lain.* |
| **C(vii)** | 1. **Detailed proposal of research project:**

*Maklumat terperinci cadangan penyelidikan:*1. **Research background including summary of previous research related to the prototype development (maximum 200 words)**.

*Keterangan latar belakang penyelidikan termasuk ringkasan dari kajian terdahulu yang berkaitan dengan pembangunan prototaip.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. **State the problem statement (maximum 200 words)**

 *Nyatakan permasalahan kajian.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. **Description of prototype including its originality, innovativeness, special features and indicate strategies to be used that will make product competitive. (maximum 250 words)**

*Huraikan prototaip yang merangkumi keaslian, inovasi, ciri-ciri khusus dan menunjukkan strategi yang digunakan bagi menghasilkan produk yang kompetitif.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. **Description of the state of the art including information on similar and difference product available in the market and existing market size (maximum 200 words).**

*Huraian ciri-ciri khusus produk yang mempunyai kesamaan dan perbezaan dengan produk yang sedia* *ada di pasaran.**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***(b) Objectives of the Research** *Objektif Penyelidikan* **Example** /*Contoh:*  **This study embarks on the following objectives:***Kajian ini berteraskan objektif berikut:** 1. To develop ......

 2) To simulate..........   3) To create ......1. To innovate ......

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***(c)Methodology**  *Kaedah penyelidikan***Please state in the form** / *Sila nyatakan di borang ini*1. Description of Methodology **(maximum 350 words)**

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. Flow Chart of Research Activities ( Please enclose in the Appendix)
2. Gantt Chart of Research Activities (Please enclose in the Appendix)
3. Milestones (Please enclose in the Appendix)

*Example of Milestone:*

|  |  |
| --- | --- |
| ***Milestone*** | ***Date*** |
| Completion on getting information, literature study, material preparation and design process verification | 31/10/2018 |
| Completion of prototype and product development | 31/02/2019 |
| Completion of test run and analysis | 01/04/2019 |
| Completion of publication (journal / proceeding / article / book chapter)  | 30/05/2019 |
| Completion of Project | 30/06/2019 |

 **(d) Significance of Product / Prototype Development (maximum 200 words).** *Signifikasi Pembangunan produk / prototaip**For example: Commercialisation value, achieving best value for money, impact to social development and environmental sustainability**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***(e) Expected Impacts (maximum 250 words).** *Jangkaan Impak*(Professional TVET/ Social Wellbeing/ Innovative System)*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_***(f) Expected Research Outcome** *Jangkaan hasil Penyelidikan*1. Publication / *Penerbitan*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. Intelectual Property / *Harta Intelek .*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. Fully Developed Prototype / *Prototaip yang dibangunkan sepenuhnya*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*1. Commercialisation / *Potensi Pengkomersialan*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |
| **D** | **ACCESS TO EQUIPMENT AND MATERIAL /** *KEBENARAN MENGGUNAKAN PERALATAN DAN BAHAN* |
| **D(i)** | **Equipment** *Peralatan* | **Location***Tempat* |
| **Example */*** *Contoh****:******Engine Test Bed******3D Printer*** | **PSMZA****PIS** |
| **D(ii)** | **Research projects that have been completed or ongoing by project leader / members for the last five years (if any). Please provide title of research, grant’s name, position, duration, year commence and year ending(if any).** *Sila sediakan maklumat berkaitan tajuk, nama geran, jawatan, tempoh, tahun mula dan tahun tamat bagi penyelidikan yang sedang/telah dijalankan oleh ketua penyelidik dalam tempoh tiga tahun terakhir. (Jika ada)* |
| **Title of Research***Tajuk penyelidikan* | **Grant’s Name***Nama Geran* | **Position / Role***Jawatan / Peranan* | **Duration***Tempoh* | **Start Date**  *Tarikh mula* | **End Date***Tarikh tamat* |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **E** | **BUDGET***/BELANJAWAN* |
|  | **Please indicate your estimated budget for this research and details of expenditure according to the guidelines attached.***Sila nyatakan anggaran bajet bagi cadangan penyelidikan ini dan berikan butir – butir perbelanjaan lengkap dengan berpandukan kepada garis panduan yang dilampirkan.* |
| **Budget details***Butiran belanjawan* | **Amount requested by applicant**  *Jumlah yang dipohon**oleh pemohon* | **Amount approved by** **PPI / RMC***Jumlah yang diluluskan oleh PPI/ RMC* |
| **Year 1**Tahun 1 (RM) | **Year 2**Tahun 2(RM) | **Total**Jumlah (RM) |
| **E(i)** | **Vote 11000 -** **Salary and** **wages***Upah dan Elaun untuk Pegawai / Pembantu Penyelidik*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  | **Please Indicate the overall Budget***Sila nyatakan bajet secara keseluruhan* |
| **E(ii)** | **Vote 21000 -** **Travelling and Transportation/***Perjalanan dan Pengangkutan*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  |  |
|  | **Budget details***Butiran belanjawan*  | **Amount requested by applicant**  *Jumlah yang dipohon**oleh pemohon* | **Amount approved by Director of PPI/RMC***Jumlah yang diluluskan oleh Pengarah PPI/RMC* |
| **Year 1**Tahun 1 (RM) | **Year 2**Tahun 2 (RM) | **Total**Jumlah (RM) |
| **E(iii)** | **Vote 24000 -** **Rental***Sewaan*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  | **Please Indicate the overall Budget***Sila nyatakan bajet secara keseluruhan* |
| **E(iv)** | **Vote 26000/27000 -** **Research Materials & Supplies** *Bekalan dan Bahan Penyelidikan*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  |  |
|  | **Budget details***Butiran belanjawan* | **Amount requested by applicant**  *Jumlah yang dipohon**oleh pemohon* | **Amount approved by Director of PPI/RMC***Jumlah yang diluluskan oleh Pengarah PPI/RMC* |
| **Year 1**Tahun 1 (RM) | **Year 2**Tahun 2(RM) | **Total**Jumlah (RM) |
| **E(v)** | **Vote 28000 -** **Maintenance and Minor Repair Services***Baik pulih kecil dan ubahsuai*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  |  |
| **E(vi)** | **Vote 29000 -** **Professional Services** *Perkhidmatan Ikhtisas*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.* |  |  |  | **Please Indicate the overall Budget***Sila nyatakan bajet secara keseluruhan* |
| **E(vii)** | **Vote 35000 -** **Accessories and Equipment***Aksesori dan Peralatan*Please specify clearly the vote involved*Sila nyatakan secara lengkap dengan pecahannya sekali.**\*Permohonan khas* |  |  |  |  |
| **TOTAL AMOUNT***JUMLAH BESAR* |  |  |  |  |
| **F** | **Declaration by applicant /** *Akuan Pemohon***(Please tick *( √ )*):****/** *(Sila tanda ( √ )):* |
|  | **I hereby declare that:***Saya dengan ini mengaku bahawa:* 1. **All information stated here are accurate, JPPKK has right to reject or to cancel the offer without prior notice if there is any inaccurate information given.**

*Semua maklumat yang diisi adalah benar, JPPKK berhak menolak permohonan atau membatalkan tawaran pada bila-bila masa sekiranya keterangan yang dikemukakan adalah tidak benar.*1. **Application of this applied research is presented for the TVET Research Grant Scheme.**

*Permohonan**projek penyelidikan gunaan ini dikemukakan untuk memohon peruntukan di bawah Skim Geran Penyelidikan TVET.***Date : Applicant’s Signature :***Tarikh : Tandatangan Pemohon : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |
| **G** | **Recommended by T-ARGS Committee** *Perakuan Jawatankuasa T-ARGS* |
|  | **Please tick ( √ )** *Sila tandakan ( √ )* **Recommended:***Diperakukan:* ***A.* Recommended** *Disokong***B. Not Recommended (Please specify reason)**  *Tidak Disokong (Sila Nyatakan Sebab)* **Comments:***Ulasan:*----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------**Name: Signature:***Nama: Tandatangan:*  **Date:***Tarikh:* |

**Note: APPLICATIONS SUBMITTED WILL BE TREATED IN FULL CONFIDENCE. THE DECISION OF THE TVET RESEARCH GRANT SCHEME COMMITTEE IS FINAL.**

*Semua permohonan dianggap sulit. Keputusan Jawatankuasa Skim Geran Penyelidikan TVET adalah* ***MUKTAMAD.***

 **Lampiran**

**REFERENCES (APA format)**

**Contoh: CARTA GANTT PELAKSANAAN PROJEK**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | Description ofActivities | July | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar | April | Mei | Jun |
| 2018 | 2018 | 2018 | 2018 | 2018 | 2018 | 2019 | 2019 | 2019 | 2019 | 2019 | 2019 |
| 1 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Literature Review / |   |   |   |   |   |   |   |   |   |   |   |   |
| Material Preparation |   |   |   |   |   |   |   |   |   |   |   |   |
| 2 | Research Methodology |   |   |   |   |   |   |   |   |   |   |   |   |
| i.  | Fabrication / |   |   |   |   |   |   |   |   |   |   |   |   |
|   | Product / Prototype Development |   |   |   |   |   |   |   |   |   |   |   |   |
| ii.  | Analysis & Evaluation |   |   |   |   |   |   |   |   |   |   |   |   |
| 3 | Result , Analysis and Discussion |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 4 | Journal Publication |   |   |   |   |   |   |   |   |   |   |   |   |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 5 | Report Writing and |   |   |   |   |   |   |   |   |   |   |   |   |
| Submission |   |   |   |   |   |   |   |   |   |   |   |   |

Progress Report is based on the research activities stipulated by Research Leader in the Gantt Chart.