



**UNIVERSITI PUTRA MALAYSIA**

***OPTIMIZATION OF CARBOXYMETHYL SAGO STARCH (CMSS)-ACID  
HYDROGEL AS A POTENTIAL THERMOSTABLE CARRIER FOR  
NEWCASTLE DISEASE VACCINE***

**NUR FATTIMA' AL-ZAHARA' BINTI TUAN MOHAMOOD**

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By

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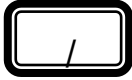
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