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جامعة عين شمس

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**VIRAL AND ANTI-VIRAL STUDIES ON
CHICKEN EMBRYOS PRIMARY
CULTURES**

**BY
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**A theses submitted in partial fulfillment
of
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In the name of God, Most Gracious, Most Merciful

This thesis is dedicated

To

My parents, martyrs of Palestinian uprising

and all enthusiastic Moslem

and also to

my relatives in my simple village Shanaway

my beloved wife and my gracious

son Mohammad

for their patience and

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LIST OF ABBREVIATIONS

AchE	Acetylcholinesterase
AA	Acrylamide
AP	Ammonium persulphate
AI	Avian influenza
BHK-21	BABY HAMSTER KIDNEY
Bis-AA	bis-Acrylamide
CL	Cell line
CPE	Cytopathic effect.
DEC 99	Duck embryo permanent cell line
BME	Eagle's Basal Medium
FCS	Fetal calf serum
HA	Haemagglutination
HI	Haemagglutination inhibition
IBDV	Infectious Bursal Disease Virus
CBMP	2-/4-/2-(4-chlorobenzamido) ethyl/phenoxy/-2-methyl-propionic acid
ME	Mercaptoethanol
MEM	Minimum Essential Medium Eagle
NDV	Newcastle disease virus
PBSA	Phosphate buffer saline
PAA	Polyacrylamide
P.V.P	Polyvinylpyrrolidone
CEFs	Primary chicken embryo fibroblast cultures
REL	Rapidly embryo lethal
SEL	Slowly embryo lethal
SDS	Sodium dodecyl sulphate
TEMED	N-N tetra ethyl-methyl -enediamine

Introduction