



Benha University, Faculty of Science
Final Examination, 1st Semester, 2012
General Entomology (111E)
Date 3/1/2013

Entomology Department
Time allowed 1 hour
80 Marks

ملحوظة:

الأسئلة في ورقتين ، ونرجو كتابة الإجابة في المكان المخصص لها في الجدول

Question 1: Write the scientific term for each of the following: (20 Marks)

The Statements	S.T.
Developmental changes of insects.	Metamorphosis
The use of Honey bee's products for medicinal purposes.	Apitherapy
Sterile-reared fly larvae for cleaning necrotic tissue from deep wounds.	Maggot therapy
The science by which we can often deduce how, when, or where a crime was committed.	Forensic Entomology
Device which invented to trained wasps to detect explosives.	Wasp hound
Any organism that causes annoyance or injury to human beings, human possessions.	Pest
Shedding the exoskeleton.	Ecdysis
A sterile female in a bee colony.	Worker
A dance of honey bees If the food is very close to the hive.	Round dance
Bee glue which is created from resins, balsams and tree saps.	Propolis

Question 2: Put the sign ✓ or x in front of each statement in the column (60 Marks)

THE STATEMENT	
All Insects have two pairs of wings.	x
The periodic shedding of the exoskeleton is called cuticle.	x
In Ametabolous insects Immatures are called larvae .	x
Insect cuticle is covered by a layer of wax that prevents desiccation.	✓
Some insects spend their entire lives in underground caves.	✓
Insects represent more than half (about 53%) of the 1.5 million species of living organisms known.	✓
Ants and termites probably make up 20% of the total animal biomass.	✓
Parasitology is the scientific study of insects.	x
Insects are similar in size, shape, and behavior.	x
Sense organs in insects include antennae, compound eyes, and ocelli.	✓
Insects are the only invertebrates that can fly.	✓
Pollination by insects may increase the production by 3 to 7 folds.	✓
Some insects inhabit deserts where water is rare and daytime temperatures exceed 80 °C.	x
Cochineal, a product of a scale insect, was widely used as a varnish for floors, furniture, photographs, playing cards.	x
In insects, Pupae are the feeding machines	x
Over the course of human history, more soldiers have died from butterflies than from bullets and bombs	x
Shellac is a pigment extracted from insect was valued for the intensity and permanence of its color.	x
Our language still reflects many traditional associations: as (mad as a mosquito).	x
Many insects are valued simply for their beauty.	✓
Many people regard insect sounds as a form of music.	✓
Both male and female mosquitoes feed on blood.	x
In insect populations, females often produce large numbers of eggs (high fertility).	x
Honey bee queen, can store sperms for months or years.	✓
The economic impact of insects is measured by the market value of products they destroy.	x
There are many insect species that reproduce asexually.	✓
Immature and adult insects may use different resources and occupy different habitats.	✓
Insects play an important role in recycling of nutrients.	✓
The theory of spontaneous generation was destroyed, when scientists found that maggots appear on meat are laid by house flies.	✓
The fruit fly (<i>Drosophila melanogaster</i>) increased our knowledge of genetics.	✓
Toxicology depends heavily on insects to test the toxicity of products.	✓
Insects could guide the next wave of advances in biomimetic robotics.	✓
Many pharmaceutical drugs can be extracted from insects.	✓
HIV is transmitted by mosquitoes.	x
Forensic entomology is the use of Honey bee's products for medicinal purposes.	x
Cuticle may be as elastic as rubber or as hard as some metals.	✓
Discovery of a new species of invertebrate is rare.	x
Exocuticle is the outermost layer of the insect's integument.	✓
Termites feed on wood	✓
All insects must have: three body parts, six jointed legs, two antennae and an exoskeleton.	✓
Insects were the first animals to use flight as an escape from predators.	✓