

V.M. V. V Sangha's

V.M. K. S. R. Vastrad Arts Science and V.S.Bellihal
Commerce college, Hunagund

(Karnataka state)

Certificate course

Academic year 2021-22

Department of Zoology

Subject: Insect, Vector And Diseases

For B.Sc. VI semester students



Head department of Zoology
V.M.K.S.R. Vastrad Arts, Science And
V.S.Bellihal commerce college Hunagund.

To

The principal

V.M.K.S.R. Vastrad Arts Science And
V.S Bellihal commerce college,Hunagund.

Subject: Kindly permission to conduct certificate course on "Insect, Vector And Diseases" for B.Sc VI semester students

Respected madam,

Department of Zoology interested to conduct a certificate course on "Insect, Vector And Diseases" and it is very important to the students from rural to motivate them. Kindly permit and provide financial assistance to run the course.

Thanking you

Date: 13-06-2022

Place: Hunagund

Your's faithfully



**Head of the Department,
ZOOLOGY**

V. M. S. R. Vastrad Arts, Science and
V. M, Commerce College,
HUNAGUND. Dist: Bagalkot



Principal

Vijaya Mahantesh Krupaposhit
S.R Vastrad Arts, Science and V.S. Bellihal
Commerce College, Hunagund - 57118





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V.M. K. S. R. Vastrad Arts, Science And V.S.Bellihal Commerce college,
Hungund

Certificate course for B.Sc VI semester students

Department of Zoology

During the year 2021-22

Subject: Insect, Vector And Diseases

Department of Zoology introducing 30 hours certificate course on "Insect Vector And Diseases". The purpose of the certificate course is to enrich the knowledge and practice in their own area. It is here by advised to the students to get admission to the above said course.

Name of the certificate course: Insect Vector And Diseases

Admission Date : - 13.06.2022

Eligibility: B.Sc VI semester students

Contact: 1. Prof. S.A. Meti - 7975246929

2. Prof. Nayana. Mara - 9902389418

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Certificate course for B.Sc VI semester students

Department of Zoology

During the year 2021-22

Subject: Insect Vector And Diseases

Hours-30

MEMBERS OF BOARD OF STUDIES (BOS)

Sl.no	List of BOS Members
1	Prof. S. K .Math. Principal. VMSR Vastrad Arts,Scicnce and V.S.Bellihal Commerce College, Hunagund.
2	Prof. R.S. Vastrad Asst. Prof in Zoology M.V.G.S College, Muddebihal .
3	Prof. Shivukumar Iregoud Asst. Prof in Zoology Pulakhishi Collage, Badami .
4	Prof. S.A. Meti. Asst. Prof. in Zoology VMKSR Vastrad Arts, Scicnce and V.S.Bellihal Commerce College, Hunagund.

Head of the Department,

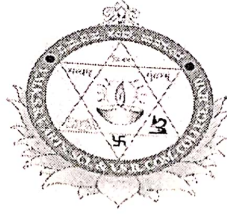
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Circular

All the students are hereby informed that college has conducting a certificate course on " Insect, Vector And Diseases" from 13.06.2022 to 18.07.2022 for B.Sc Students. Interested students enroll your names at course coordinator

Mr. S.A. Meti.

Date: 13-06-2022

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Department of Zoology

During the year 2021-22

Subject: Insect Vector And Diseases

Hours-30

SYLLABUS

Units	Syllabus	Hours
Unit I	Introduction to Insects: General features of Insects, Morphological features, Head-Eyes, Types of antennae, Mouth parts and feeding habits.	05 Hours
Unit-II	Concept of vectors: Brief introduction of carrier and vectors (mechanical and biological vector).	04 Hours
Unit-III	Dipteran as Disease Vectors: Dipterans as important insect vectors Mosquitoes, Houseflies; Study of mosquito-borne diseases-Malaria, Dengue, Chikungunya, Filariasis; Causes, symptoms, control of mosquitoes and control of housefly.	10 Hours
Unit IV	Siphonaptera as Disease Vectors: Fleas as important insect vectors; Study of Flea-borne diseases- Plague, Control of fleas.	04 Hours
Unit V	Siphunculata as Disease Vectors: Human louse(Head, Body) as important insect vectors: Study of louse-borne. Diseases – Typhus fever and control of human louse.	04 Hours
Unit VI	Hemiptera as Disease Vectors: Bugs as insect Vectors: Blood-sucking bugs; Chagan disease, Control and Prevention measures.	03 Hours

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During the year 2021-22

Subject: Insect Vector And Diseases

Hours-30

RESOURCE PERSON

Units	Syllabus	Hours
Unit I	Introduction to Insects: General features of Insects, Morphological features, Head-Eyes, Types of antennae, Mouth parts and feeding habits.	S.A. Meti
Unit-II	Concept of vectors: Brief introduction of carrier and vectors (mechanical and biological vector)	S.A. Meti
Unit-III	Dipteran as Disease Vectors: Dipterans as important insect vectors Mosquitoes, Houseflies; Study of mosquito-borne diseases-Malaria, Dengue, Chikungunya, Filariasis; Causes, symptoms, control of mosquitoes and control of housefly.	S.A. Meti
Unit IV	Siphonaptera as Disease Vectors: Fleas as important insect vectors; Study of Flea-borne diseases- Plague, Control of fleas	N.D. Mara
Unit V	Siphunculata as Disease Vectors: Human louse(Head, Body) as important insect vectors: Study of louse-borne. Diseases – Typhus fever and control of human louse.	N.D. Mara
Unit VI	Hemiptera as Disease Vectors: Bugs as insect Vectors: Blood-sucking bugs; Chagan disease, Control and Prevention measures	N.D. Mara

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During the year 2021-22

Subject: Insect, Vector And Diseases

TIME-TABLE 2021-2022


Day	DATE	Period Time 2.30 to 3.30
1	13.06.2022	S.A.Meti
2	14.06.2022	S.A.Meti
3	15.06.2022	S.A.Meti
4	16.06.2022	S.A.Meti
5	18.06.2022	S.A.Meti
6	20.06.2022	S.A.Meti
7	21.06.2022	S.A.Meti
8	22.06.2022	S.A.Meti
9	23.06.2022	S.A.Meti
10	24.06.2022	S.A.Meti
11	25.06.2022	S.A.Meti
12	27.06.2022	S.A.Meti


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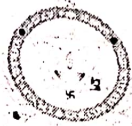
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Hunagund



13	28.06.2022	S.A.Meti
14	29.06.2022	S.A.Meti
15	30.06.2022	S.A.Meti
16	01.07.2022	S.A.Meti
17	02.07.2022	Nayana D Mara
18	04.07.2022	Nayana D Mara
19	05.07.2022	Nayana D Mara
20	06.07.2022	Nayana D Mara
21	07.07.2022	Nayana D Mara
22	08.07.2022	Nayana D Mara
23	09.07.2022	Nayana D Mara
24	11.07.2022	Nayana D Mara
25	12.07.2022	Nayana D Mara
26	13.07.2022	Nayana D Mara
27	14.07.2022	Nayana D Mara
28	15.07.2022	Nayana D Mara
29	16.07.2022	Nayana D Mara
30	18.07.2022	Nayana D Mara


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Certificate course for B.Sc VI semester students

Department of Zoology

subject: Insect Vector And Diseases

During the year 2021-22

Student Enrolled List

Sl.no	Reg.No	Name
01	S1937006	Amaresh Kumbar
02	S1937009	Aruna Ganti
03	S1937015	Bhagyashree
04	S1937018	Bharata kumar
05	S1937020	Chanchal Vaishnav
06	S1937021	Chetan Gudadinni
07	S1937022	Deepa Hampannavar
08	S1937030	Hanamanth Madar
09	S1937037	Kavita Madar
10	S1937043	Mailari Maddi
11	S1937051	Meharunnisa Talikoti

12	S1937054	Nagaraj Shilavantar
13	S1937063	Praveen Baddi
14	S1937065	Praveenkumar Patil
15	S1937066	Prem Layadagundi
16	S1937068	Radhika Hadagali
17	S1937070	Rakesh Shinnur
18	S1937072	Reshma
19	S1937075	Sahana Ilal
20	S1937076	Sangeeta Walikar
21	S1937078	Satish Benakanadoni
22	S1937082	Sharanabasava Hiremath
23	S1937085	Shilpa
24	S1937089	Shridhar Patil
25	S1937098	Tejashwini
26	S1937104	Vijayalaxmi Pattar

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Report

01	Name of the Department	Zoology
02	Title of the Certificate course	Insect Vector And Diseases
03	List of Experts	Prof. S.A. Meti Prof. Nayana Mara
04	Duration of the course	30 hours
05	The date of introduction and closing	13.06.2022 to 18.07.2022
06	No. of students	26
07	Objectives	<ol style="list-style-type: none">1. To know about the general features and morphological features of insects.2. Insects play a unique and important role in the Earth's ecosystem.3. Discuss methods used to control vector-borne disease.4. To explain basic models of disease causation.

		5. To understand the applicability of causal criteria as applied to epidemiological studies.
08	Course outcomes	<ul style="list-style-type: none"> * Brief account of carrier and vectors. * Take cognizance of the importance of studying causes, systems, control of mosquitoes and housefly. * Identify different types of insect vector diseases. * Differentiate types of bugs as insect vectors.


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Evaluation through Examination

Question Paper

1. Most important reason for the success of insects as a group is probably
 - A: parhingenetic reproduction
 - B: muscle strength to weight ratio
 - C: ability to digest unusual food
 - D: ability to fly
2. Insects are thought to be so very successful because of
 - A: Their small size
 - B: Ecological diversity
 - C: Reproductive potential
 - D: All of the above
3. Basal segment of the antenna is
 - A: Scape
 - B: Coxa
 - C: Pedicel
 - D: Trochanter
4. In resistant insects and houseflies DDT is converted into
 - A: Dichlorodiphenyl acitic acid
 - B: Dichloro benzophenon
 - C: Dichlorodiphenyl dichloroethane
 - D: Dichlorodiphenyl dichloroethylene
5. Plague is caused by
 - A: leishmania donovani
 - B: Yersinia pestis
 - C: Salmonella typhimuum
 - D: Trichinella spiralis

6. Which of the following is correct matching pair of disease and pathogens

A: Filariasis – Wuchereria

B: Kala-azar- Glossinia

C: Sleeping sickness – leshmania

D: Malaria -Anopheles

7. Which of the following is not a vector borne disease?

A: Yellow fever

B: Dengue fever

C: Viral fever

D: Malaria

8. Recurring chills and fever in Malaria is due to

A: destruction of micro and macro gametocytes by the WBCs

B: Rupturing of RBCs by rapid multiplication and release of haemozoin

C: Toxins released by trophozoites

D: Sporozoites released from RBCs and are rapidly being killed in the spleen

9. Sporozoites of the Malaria parasites are found in

A: the saliva of female anopheles mosquito, which is freshly Molted

B: the saliva infected female anopheles mosquito

C: RBCs of infected human

D: the spleen of infected human

10. Kala-azar is transmitted by

A: dragon fly

B: House fly

C: Tse-tse fly

D: sand fly



11. Causative agent of Malaria

A: Plasmodium vivax

B: Plasmodium falciparum

C: Plasmodium ovale

D: All of the above

12. Who is the intermediate host of Malaria

A: Female Anopheles mosquito

B: Male Anopheles mosquito

C: Human

D: Both A & C

13. Which of the following is a disease also known as break bone fever

A: Malaria

B: Dengue

C: KFD

D: Q fever

14. What is the most important vector of plague

A: Xenopsylla cheopis

B: Xenopsylla astia

C: Xenopsylla brasiliensis

D: All of the above

15. In which disease elephantoid fever occurs

A: Malaria

B: Kala-azar

C: Filariasis

D: Dengue



16. In which disease patients walk in bent posture

A: Malaria

B: Chikungunya

C: Filaria

D: Dengue

17. ICT used for detection of

A: Malaria

B: Filaria

C: None

D: Both

18. Insects which feed on one type of food are called

A: polyphagous

B: monophagous

C: Entomology

D: None of the above

19. Insects breath through

A: Gills

B: Nostrils

C: Spiracles

D: None of the above

20. Which of the following is not a disease transmitted by vectors?

A: yellow fever

B: Dengue fever

C: Fever caused by virus

D: Malaria

**Head of the Department,
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Commerce College, Hungund-587111



Key Answers

1. D-Ability to fly
2. D- All of the above
3. A-Scape
4. D-Dichlorodiphenyl dichloroethylene
5. B-Yersinia pestis
6. A- Filariasis-Wuchereria
8. B- Rupturing of RBCs by rapid multiplication and release of haemozoin
7. C-Viral fever
9. B-The saliva infected female anopheles misquoto
10. D-House fly
11. D-All of the above
12. C-Human
13. B- Dengue
14. A- Xenopsylla cheopsis
15. C-Filaria
16. B-Chikungunya
17. B-Filaria
18. B-Monophagous
19. C- Spiracles
20. C- Fever caused by virus

**Head of the Department,
ZOOLOGY**

**V. M. S. R. Vastrad Arts, Science and
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CERTIFICATE COURSE ON "INSECT VECTOR AND DISEASES"

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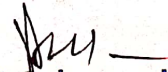
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Prof S.A.Meti

**Head of the Department,
ZOOLOGY.**

V. M. S. R. Vastrad Arts. Science &
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Dr.S.R.Golagound

Coordinator IQAC

Vijaya Mahantesh Krupapohit S.R.Vastrad
Arts,Science & Vijay Shankarappa Bellihal
Commerce College, Hungund-587118
Dist:Bagalkote State:Karnataka



Prof. S.K. Math

Principal

Vijaya Mahantesh Krupaposhit
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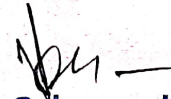
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Prof S.A.Meti

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Dr.S.R.Golagound

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Prof. S.K. Math

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Dr.S.R.Golagound
Coordinator,
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Prof. S.K. Math
Principal

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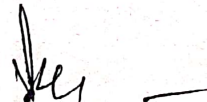
This is to Certify that Mr/Miss Amaresh. Kumber
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Prof S.A.Meti

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Dr.S.R.Golagound

**Coordinator
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Prof. S.K. Math

Principal

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Coordinator
QAC**

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Commerce College, Hungund-587118
Dist:Bagalkote State:Karnataka**



Prof. S.K. Math

Principal

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Certificate course on Insect, vector And Diseases

Class conducted photo



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