

Guidelines for Essay Writing

The Department of Microbiology is organizing an Essay competition on the topic “**Role of Microbes in Nutrition and Health**” for University Campus Departments. The interested students can prepare Essay as per the guidelines given below. The last date for submission of Essay in soft copy is 13.9.21. You have to send the **pdf** copy of your Essay on **micro@mgsubikaner.ac.in**.

The participants of the Essay competition are required to write a scientific essay on the topic ‘**Role of Microbes in Nutrition and Good health**’. Your Essay should include creativity, be concise, pertinent and written with clarity and accuracy of facts. You are expected to make thorough search of the literature (offline or online as per your convenience) before writing the Essay.

The manuscript should be written in English, Times New Roman, 12 font, 1.5 line spacing, overall word limit is 3,000 and may contain no more than 2 Figures/Tables. It should be in MS Office Word format. You have to submit a **pdf** copy of your Essay bearing your name, class, department and signature.

Organization

The essay should introduce the topic, discuss it, and lead to a conclusion. The essays shall have four parts:

1. Introduction

An introduction is used to define the scope of the essay and to give such background information as is necessary for the discussion of the topic. It should be brief (no more than about one-tenth of the essay length). It should include the following,

(A) Background: - A brief survey of relevant introductory information to the topic (often historical) serves to place that topic in context for the reader. Depending on the topic, it may also be necessary to define important technical terms, or special uses of words.

(B) Scope: - A statement of your interpretation of the topic (that explains how you intend to cover it) can also be included.

2. Development of the Subject Matter

(Note: Please do not use this as a heading in your essay)

In this section, the logical development of the subject matter must be made apparent to the reader. Long descriptions of a topic is not required, but your critical analysis of the topic. This means that you are expected to read widely about the topic, and to select the best references. A good essay is expected to have at least 10, and preferably closer to 20 references comprising a mix of primary research and recent review articles. In all technical writing there are literary conventions to be met in acknowledging sources of information (i.e. research papers, thesis, books etc). Not only are you ethically bound to acknowledge any facts or ideas that are not your

own using **citations** in the text, but a complete reference list of your sources is also required by readers wishing to pursue the topic. Make sure you read the section on **plagiarism** at the end of this guide. We emphasize that failure to use citations in your text and list all references at the end of your essay will lower your final mark. One or two **figures** or **tables** may be used in support of the text, as it is often possible to convey information more accurately and concisely this way. All the diagrams and figures should be referred to in the text. Only the most relevant information should be used to support your argument (i.e. the evidence to support your interpretation of the topic). Always refer to any figures or tables in the text and cite your source for them in their captions.

3. Conclusion

The conclusion should:

- (1) Integrate the major points presented in the body of the essay.
- (2) Provide a summary.

It may also suggest further lines of research that might provide the answers to as yet unsolved problems. The conclusion is usually around one-tenth of the essay's length.

4. References

The following examples should guide you through most referencing situations.

How to use citations:

A one author paper should be cited in the text as (surname, date), a two author paper as (surname and surname, date) and a paper with three or more authors should be cited as (first author surname *et al.* date). If the information comes from more than one paper each citation is divided with a semicolon. Here are some examples of how references can be cited in the text of your essay:

Exposing the leaf surfaces of shaded under-storey plants to sunlight without giving them a sufficient period for acclimation can result in a reduced rate of photosynthesis (Levitt, 1980).

In a little-known Russian paper on the effects of day length on seedling growth in *Eucalyptus*, Shaposhnikov (1935) suggested that the long-day responses of two species and the short-day responses of two others were linked to the geographical ranges of each of the species in Australia. More than 25 years after this early investigation, quantitative long-day responses were again reported for seedlings of several species (Scurfield, 1961; Miles, 1965). At about the same time Vaartaja (1963) noted that photoperiodic responses were totally absent in seedlings of four additional species. Since then, the trend towards minimising the importance of day length effects in the genus has continued. Green (1967) and especially some more recent authors (Ashton, 1975; Cremer, 1975; Specht and Brouwer, 1975), have all concluded that seasonal shoot development in the field involves temperature responses rather than weak photoperiodic responses which affect growth in some species.

In a previous report we described the various forms of leaf anatomy found in the Chenopodiaceae (Carolin *et al.* 1975).

Note that the citations are **in the sentence**. They are **not** after the sentence, that is, not after the full stop. If similar information comes from multiple papers, they should all be cited in chronological order. If multiple papers are cited from the same year put them in alphabetical order.

If you have no choice but to rely on one author's citation from another author because you could not obtain a copy of the original work to read:

As shown by Morgan (1944) (cited in Smith 1957) ... or Morgan (1944, cited by Smith 1957) showed that.... [**Note: both authors should be listed in the bibliography.**]

Quote directly from a reference **only if highly pertinent**, and then use quotation marks and cite the author. It is rare to need to use a direct quote — avoid it where possible.

How to write your reference list:

At the end of your essay you should include a list of the references you used to gather your information for your essay (listed under the heading: **References**). **All and only those authors** that you have cited in the text must appear in the reference list. They should be listed in **alphabetical order** (using the first author's surname). If two or more articles have the same first author surname they should be listed in the order in which they were published (earliest to most recent). The format for several types of references (e.g. journal articles, chapters from books) is as follows.

Note that the different types are **not** separated in the list and we do not use dot points, or number each.

For a paper:

One author: cited in text as (author surname, date)

Reis PJ (1978) Effectiveness of intravenous and abomasal doses of mimosine for defleecing sheep and effects on subsequent wool growth. *Australian Journal of Agricultural Research* **29**, 1043-1055.

Two authors: cited in text as (author surname and author surname date)

Stover LE, Partridge AD (1973) Tertiary and Late Cretaceous spores and pollen from the Gippsland Basin, south-eastern Australia. *Proceedings Royal Society Victoria* **85**, 237-286.

Three authors: cited in text as (first author surname *et al.* date)

Connor DJ, Legge NC, Turner NC (1977) Water relations of mountain ash (*Eucalyptus regnans* F. Muell.) forests. *Australian Journal of Plant Physiology* **4**, 753-762.

Many authors: cited in text as (first author surname *et al.* date).

Please note here and in the three author example shown above that although the abbreviation *et al.* is used for three or more authors in the citation, the names of all the authors of a publication

must appear in the reference list e.g. the reference below would be cited in your essay as (Coding *et al.* 1987) but written in your reference list in the following format.

Coding JR, Catt KT, Brown JM, Kaltenback CC, Cumming IA, Mole BJ (1987) Radioimmunoassay for ovine luteinizing hormone. Secretion of luteinizing hormone during estrus and following estrogen administration in the sheep. *Endocrinology* **85**, 133-142.

For a book: cited in text as (author surname/s date), the date being the date of publication of the edition used, not the reprint date (if given).

Burrell H (1927) 'The platypus.' (Angus and Robertson: Sydney)

Jones DL, Clemesha SC (1993) 'Australian ferns and fern allies.' (The Currawong Press: Sydney)

For a chapter in a book: cited in text as (surname of the person/s who wrote the chapter date).

Shiel RJ (1980) Billabongs of the Murray-Darling system. In 'An ecological basis for water resource management.' (Ed. WD Williams) pp. 376-390. (Australian National University Press: Canberra)

This would be cited in the text as (Shiel 1980), not (Williams 1980).

Hauck RD (1983) Agronomic and technological approaches to minimizing gaseous nitrogen losses from croplands. In 'Gaseous loss of nitrogen from plant-soil systems.' (Eds JR Freney, JR Simpson) pp. 285-312. (Kluwer: Boston)

This would be cited in the text as (Hauck 1983).

For a thesis

Phillips RA (1967) Stomatal characteristics throughout a tree crown. MSc. Thesis (University of Washington: Seattle)

For reports/bulletins/conference proceedings

Ball PR, Keeney DR (1983) Nitrogen losses from urine-affected areas of a New Zealand pasture, under contrasting seasonal conditions. In 'Proceedings of the XIV International Grassland Congress.' pp. 342-344. (Westview Press: Boulder)

Chippendale GM, Wolf L (1981) The natural distribution of *Eucalyptus* in Australia. Australian National Parks and Wildlife Service, Special Publication No. **6**, Canberra.

All references are listed alphabetically and were just sectioned into different types above for the purpose of clarity. Occasionally an author will publish more than one article in the same year. Use a, b, etc., to distinguish the references in the sequence of references in the text.

Laverty TM (1994a) Costs to foraging bumble bees of switching plant species. *Canadian Journal of Zoology* **72**, 1293-1301.

Laverty TM (1994b) Bumble bee learning and flower morphology. *Animal Behaviour* **36**, 733-

740.

There is an increasing tendency to use the whole journal title in the biological literature and this is our preferred format for referencing in your essays. If you want to know what journal name that an abbreviation stands for, a list of standard abbreviations for journals may be found online in Google search.

e.g. *Ann. Bot.* is the abbreviation for *Annals of Botany*

Ann. Rev. Pl. Physiol. is the abbreviation for *Annual Review of Plant Physiology*

Plagiarism and cheating:

The submitted Essay must be a student's own work. This does not mean that students may not make use of the work of others. However, in quoting or paraphrasing material from other sources, those sources must be acknowledged in full. It may be useful to seek the help of your teacher in preparing the Essay, and to enlist the help of fellow students in sorting out ideas, but the final product must be written by the student in his or her own words. Plagiarism occurs when students fail to acknowledge that ideas have been borrowed. Specifically, it occurs when:

- phrases and passages are used verbatim without quotation marks and without a reference to the author
 - an author's work is paraphrased and presented without a reference
 - other students' work is copied or partly copied
 - other people's designs, codes and images are presented as the student's own work
 - laboratory results of someone else are used without appropriate attribution
 - items for assessment are written in conjunction with other students (without prior permission of the relevant staff member)
 - a piece of work has already been submitted for assessment in another unit.”

Source: <http://www.monash.edu.au/teaching/academic-integrity/student/whatisplag.html>