

PART I (12 marks)

❖ Fill in the gaps in the sentences according to the definitions. The first two letters are given.

1-The hepatitis B virus is present throughout the world and the cause of **recurrent** epidemics, (*repeated, again and again*) [1]

2- A major health problem is that medical facilities are not **evenly** distributed across the country, (*regularly, equally*) [1]

3-The strength of a steel alloy depends on the **ratio** of iron to carbon. (*mathematical relationship of proportion*) [1]

4-The blood vessels of the fetus can be seen through the **thin** skin, (*≠ thick*) [1]

5-The experiment enables the students to **work out** the rate of cell mitosis, (*calculate, two words*) [1]

6-Under stress, the heart **pulsates** faster. (*beats*) [1]

7-The volume of the amniotic fluid is **roughly** 60 ml. (*about, approximately*) [1]

8-Six days after fertilization, the embryo consists of a **cluster** of 100-300 cells, (*agglomeration, concentrated group*) [1]

9-The fetus **monitors** its own temperature from 30 weeks onwards. (*controls, follows*) [1]

10-The cell chronobiology is the study of the **daily** changes in the cell activities. (*over a period of 24 hours, circadian rhythm*) [1]

❖ Supply the missing words

Gases consist of molecules that are in fast **random** [0.5] motion.

[0.5] Glaciers are formed by a **recurrent/periodic** process of sublimation and recrystallisation.

[0.5] The **fluctuating**... climate during the Pleistocene period was responsible for the extinction of many species.

[0.5] The "Spirit of St Louis" made the first **non-stop** transatlantic flight in 1927.

[0.5] Pulsars emit short **recurrent/periodic**.. bursts of radiation about once per second.

- a. recurrent
b. fluctuating
c. periodic
d. random
e. non-stop

Part II (8 marks)

1-What is the definition of the **prefix** and the **suffix**?

Definition

Prefix: is the word element (word part) which when combined with a root(stem), alter or augment the meaning. It precedes the root. e.g.: **angiosperm** , **diploid**,..... [0.5]

Suffix: is the word element (word part) which when combined with a root(stem), alter or augment the meaning. It follows the root. e.g.: **dermophyte**, **Lepidoptera**, **Osteoma** [0.5]

2-What is the main part of the biological term?

The main part of the biological term is the stem (root). [0.5]

3-Why is Terminology so important ? give only one argument . [0.5]

- the ordering of knowledge on grounds of the relationships of concepts (general theory of science, conceptual classification for each scientific discipline)
- the transfer of knowledge, skills and technology (education, training, reading of scientific and technical texts, etc.)
- the formulation and dissemination of scientific and technical information (scientific writing and editing, publishing)
- the translation of scientific and technical texts into other languages
- the abstracting and condensing of subject information
- the storage and retrieval of scientific and technical information (indexing languages, thesauri, classification schemes).

4- Break down these terms by mentioning word elements and the origin and the meaning of each element .

		meaning	
	Osteoma	The tumor of the bone [0.25]	origin
prefix
stem	Ost, oste [0.25]	bone [0.25]	Greek [0.25]
suffix	oma [0.25]	Mass, tumor [0.25]	Greek [0.25]

		meaning	
	Dermalgia	Painful skin [0.25]	origin
prefix
stem	derm [0.25]	skin [0.25]	Greek [0.25]
suffix	Algia, algo, alge [0.25]	pain [0.25]	Greek [0.25]

5-Complete the table :

Word Part (word element)	Word Part (word element) Meaning	Word element) Example	Meaning of Example
extra[0.25]	Outside	Extracellular	Outside the cell[0.25]
auto[0.25]	Self	autotroph[0.25]	Self feeder (can make their own energy, usually by photosynthesis)
hetero[0.25]	Different, other[0.25]	-Heterozygous	-Offspring gets different forms of same trait (Tt).
trans-	Across, through[0.25]	transport[0.25]	-Across a cell membrane

5-Give the opposite of these terms: **heterozygous** ≠ homozygous[0.25] ; **autotroph** ≠ heterotroph[0.25]

Good luck