```
The studying of the main root ontogenesis showed that the root is generated
from... {
=embryo root of the seed
~apical meristem
~pericycle
~lateral meristem
~intercalary meristem
}
```

Investigated axial organ without nodes has radial symmetry, positive geotropism, provides mineral nutrition and anchoring in the soil. This organ is ... {

```
=root
~stem
~leaf
~rhizome
~seed
```

}

From the given underground organs we choose metamorphoses of the root, namely  $\dots \{$ 

```
=edible root of carrot
~tubers of potato
~rhizomes of Convallaria majalis (lily-of-the-valley)
~bulbs of garlic
~corms of saffron
}
```

Roots of the plants Fabaceae (Legume) Family are determined by the presence of ... { =root nodules on the roots ~fungus-roots ~reproductive buds ~corm ~bulbs }

The studied mycorrhiza of Quercus robur (english oak) is the symbiosis roots of higher plant with  $\dots$  {

```
=fungus
~alga
~nitrogen-fixing bacteria
~lichen
~cianobacterium
}
```

When studying white mistletoe, - perennial medicinal semiparasite plant, - it was revealed that its embryonic root buries into higher plant stem tissue and reaches vascular tissue system. This type of roots is called: {

```
=haustorial roots
~photosynthetic roots
~aerating roots
~contractile roots
~aerial roots
}
```

The apical bud of the generative shoot early stops its development, and growth and branching of the inflorescence are provided by two lateral buds, which are situated oppositely under the apex. So, shoot grows ... { =pseudodichotomic ~equaldichotomic ~monopodialy ~unequal-dichotomic ~tillering }

Apical bud of a sprout stops its development early and growth is realized due to two lateral buds placed opposite one another under the apex. Such ramification is called: {

```
=pseudodichotomic
~nonequidichotomic
~sympodial
~monopodial
~equidichotomic
}
```

Shoots of the Cucumis sativus (cucumber) twine around the support and climb up, so they are ... { =creeping ~decumbent

```
~upright
~ascending
~climbing
}
```

Hop sprouts wind around a support and climb upwards. That means that they are: { =creeping ~arrect

```
~recumbent
```

- ~tenent
- ~trailing

}

Among the given specimens of aboveground shoot metamorphoses there are such, that develop from lateral buds in leaf angle and provide vegetative reproduction. These are: {

```
=air bulbils
~stolons
~bulbs
~tubers
~runners
}
```

Macroscopical analysis of the branch of the Crataegus (hawthorn) with a thorn testifies, that the thorn is a metamorphosis of the  $\dots$  {

=shoot ~stipules ~leaf blade ~petiole ~cells of the epidermis }

While investigation of the medicinal plant we find, that its underground organ has nodes, internodes, filmy leaves, buds and adventitious roots, so this is ... { =rhizome

```
~edible root
~tuber
~bulb
~corm
}
```

Examination of a medicinal plant revealed that its underground organ had nodes, internodes, scale-shaped, gemmae and secondary roots. Therefore, this underground organ is: {

```
=rhizome
~tuber
~stolon
~storage root
~root bulb
}
```

If the prongs on the edge of the leaf blade are inclined to the top and have sides of different length, the edge of the leaf blade is...  $\{$ 

```
=serrated
~toothed
~notched
```

```
~crenate
~wavy
}
```

A phenomenon, when plants have leaves that differ as for their shape, size and degree of irregularity of the leaf blade on its stem, is called ... { =heterophyllous ~venation ~metamorphosis ~leaf mosaic ~modification }

During practical field session students have detected plant with diversity of leaves that differ by their placement on stem, parts development, size, shape, lamina division. This phenomenon is called: {

```
=heterophylly
~phyllotaxy
~metamorphosis
~leaf mosaic
~venation
}
```

The Lamiaceae (Mint) Family plants have the property that couples of leafs in two neighbor node are situated in mutually antithetic planes, i.e. {

```
=crosswise opposite
~distichous crosswise opposite
~whorled
~turbinal
~contortuplicate
}
```

Each stem node of white deadnettle (Lamium album) has two leaves which grow perpendicularli to the le3aves of the previous node. Such leaf arrangement is called: {

```
=crosswise opposite
~verticillate
~rosette
~leaf mosaic
~spiral
}
```

If each node of the stem has more than two leaves, this leaf arrangement is... { =whorled

```
~spiral
~arranged opposite
~cross-arranged opposite
~rosette
}
```

Leaf has one main vein from which lateral veins go away evenly. This type of venation is called  $\dots$  {

```
=pinnate
~palmate
~arcuate
~parallel
~dichotomous
}
```

Morphological analysis of leaves revealed that each vein runs along the lamina separately and the veins join together only at the top of the lamina. This kind of venation is called: {

```
=arcuate
~dichotomous
~palmate
~parallel
~pinnate
}
```

During morphological analysis of lily-of-the-valley (Convallaria majalis) leaf it was noted that lamina has wide elliptic shape and numerous veins are parallel to leaf margin and merge only at the leaf point. What is this venation type called? {

```
=arcuate
~parallel
~palmate
~pinnate-reticulate
~dichotomous
}
```

In the plant leaves we distinguish the central (or main) vein, from which diverge lateral veins, which branch repeatedly and make the net of small veins. So, the venation type of the leaf is ... {

```
~pinnate-reticulate
~arcuate
~parallel
~palmate-reticulate
~dichotomous
}
```

While students carry out morphologic analysis of leaves of different plants, they paid attention to the leaf, in which length of the blade was 5 times longer than its width. This form of the leaf blade is called ... {

```
=linear
~lanceolate
~ovoid
~kidney shaped
~elliptical
}
```

During the morphologic analysis of various plant leaves the students found the leaves, whose length of the leaf blade is 5 times more than its width. Specify the shape of the leaf blade: {

```
=linear
~elliptical
~lanceolate
~ovoid
~reniform
}
```

```
Leaf venation in monocotyledonous plants typically is... {
=parallel
~pinnati-edge
~pinnati-reticular
~palmati-loop
~ palmati-reticular
}
```

```
The leaves are peltate; 5-7 similar veins spread from the plate base and branch
repeatedly. So, such venation is... {
=palmately reticulate
~palmately-edge
~parallel
~arcuate
~pinnately-reticulate
}
```

The leaf has oblong leaf blade, which is cut into the lobes up to 1/3 of the leaf size, so the leaf is ... { =pinnatilobate ~pinnatipartite ~palmatisected ~palmatisected } Low stem leafs of the Leonurus cardiaca are divided until the middle of lamina into 3 or 5 parts. This means that they are: { =tripartite- or palmatipartite ~tripartite- or palmatidissected ~tripartite- or palmaticompound ~impari-pinnaticompound ~ impari-pinnatipartite }

Examination of a medicinal herb revealed that its leaves were divided down to the base of the leaf blade with segments radiating from a common point in a fan manner. These leaves are: { =palmatisected

```
~pinnatisected
~pinnatisected
~palmatipartite
~palmatilobate
}
```

When analysing the officinal raw material it has been determined that leaves are cut up to the base of the blade, its segments are situated fan-like. So, these leaves are  $\dots$  {

```
=palmatisected
~pinatisected
~palmatipartite
~pinatipartite
~palmatilobate
}
```

A leaf consists of three leaflets situated on the top of common petiole (rachis). This leaf is ... { =tricompound ~trisected ~palmatisected ~paripinnately compound ~ imparipinnately compound }

Leaves of the *Aesculus hippocastanum* consist of 5-7 leaflets, which are situated on short rachis of the common petiole. So they are ... { =palmately compound ~pinnately compound ~pinnatisected ~palmatisected ~palmatilobate }

A representative of the Legume family has a leaf with common petiole (rachis) with five pairs of opposite leaflets and one apical. So, the leaf is ... { =imparipinnately compound ~paripinnately compound ~palmately compound ~pinnatisect ~palmatisected. }

Leaves of the pea (Pisum sativum) are attached to prop with the help of tendrils. These tendrils are metamorphoses of ... { =leaflets of the compound leaf ~petiole of the compound leaf ~simple leaves ~petioles ~stipules }

Leaves of bastard acacia (Acacia) have overgrown flat petioles, which perform the photosynthesis function. They are called ... { =phyllodes ~thorns ~tendrils ~cladodes ~pitcher leaves }

In the morphological study of the plant it is observed that at the base of the compound leaf there are paired thorns, they are metamorphosis of the ... { =stipules

```
~leaflets
~rachises
~petiolules
~petiole
```

}

In the process of morphological description of Salvia, students paid attention to bright bracts, which serve to attract pollinating insects and are modification of: { =leaves ~androecium ~shoots ~pedicles ~receptacle }