Asexual Reproduction: Practice Questions #1

1. Which method of reproduction is carried on by the paramecium?
   (1.) budding (2.) sporulation (3.) binary fission (4.) multiple fission

2. During binary fission, which is true of a daughter cell?
   (1.) It has one-half as many chromosomes as the parent cell.
   (2.) It has the same number of chromosomes as the parent cell and is the same size as the parent.
   (3.) It has twice as many chromosomes as the parent cell.
   (4.) It has as many chromosomes as the parent cell, but is smaller.

3. A runner develops new strawberry plants which develop into new individuals. This best illustrates the process of
   (1.) vegetative propagation (2.) gametogenesis (3.) meiosis (4.) regeneration

4. Which is NOT an advantage of grafting?
   (1.) The graft is identical to the parent plant it is obtained from.
   (2.) Grafting allows the propagation of seedless fruits.
   (3.) The graft combines the characteristics of the stock and scion in the graft.
   (4.) Grafting may allow for the faster production of desirable fruits.

5. A piece of stem was cut from a plant and was placed in a cup of water. After two weeks, roots formed. Which method of reproduction was demonstrated by this procedure?
   (1.) regeneration (2.) sexual reproduction (3.) vegetative propagation (4.) budding

6. The chromosomes in the young plants growing from the leaf are produced by
   (1.) mitosis (2.) meiosis (3.) sporulation (4.) buds

7. If an organism reproduces asexually, its offspring will most likely be
   (1.) genetically identical to the parent (2.) genetically different from each other (3.) produced as a result of fertilization (4.) produced from specialized cells known as gametes

8. When a mushroom releases spores this exemplifies
   (1.) meiosis (2.) gametogenesis (3.) asexual reproduction (4.) binary fission

9. Which process is illustrated in the diagram of a yeast cell below?

   ![Yeast Cell Diagram]

   (1.) regeneration (2.) budding (3.) binary fission (4.) vegetative propagation
10. Which phrase best describes the process represented in the diagram below?

(1.) development of seeds in an ovule
(2.) germination of a pollen grain in a flower
(3.) identical gametes being formed by mitotic cell division
(4.) daughter cells being formed by mitotic cell division

11. Which diagram represents the reproductive process of cutting?

12. Which diagram best shows the process of binary fission in an ameba?
13. Which row in the chart below best describes asexual reproduction?

<table>
<thead>
<tr>
<th>Row</th>
<th>Number of Parents</th>
<th>Comparison of Offspring to Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>one</td>
<td>identical</td>
</tr>
<tr>
<td>B.</td>
<td>one</td>
<td>different</td>
</tr>
<tr>
<td>C.</td>
<td>two</td>
<td>identical</td>
</tr>
<tr>
<td>D.</td>
<td>two</td>
<td>different</td>
</tr>
</tbody>
</table>

14. The diagram below illustrates asexual reproduction in yeast.

Yeast produce offspring that usually have

A. genes that are different from those of the parent
B. genes that are identical to those of the parent
C. half of the genetic information of the parent
D. organelles that are not found in the parent

15. A technique used to reproduce plants is shown in the diagram below.

This technique is a form of

A. sexual reproduction
B. asexual reproduction
C. gamete production
D. gene manipulation
Answer Key 1: Asexual Reproduction

1. 3
2. 4
3. 1
4. 3
5. 3
6. 1
7. 1
8. 3
9. 2
10. 4
11. 4
12. 3
13. A
14. B
15. B