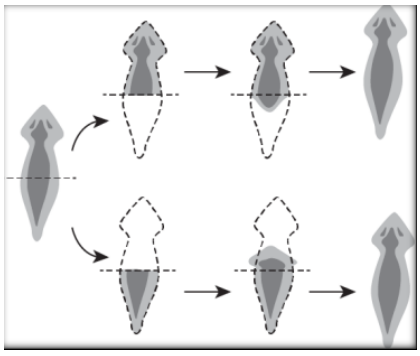
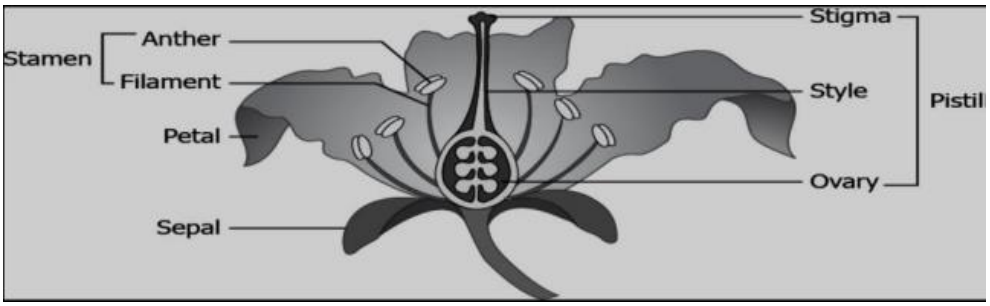
THE VILLAGE INTERNATIONAL SCHOOL
"We Nurture Dreams"

Grade 10

Monthly test -3 Revision Worksheet

Q.No	Questions	Marks
1	What can be concluded about the division in plasmodium? (a) The cyst divides repeatedly to form many daughter cells. (b) The cell divides multiple times giving rise to many daughter cells. (c) The nucleus divides repeatedly inside the cell to form new daughter cells. (d) The cyst enlarges in size and then bursts producing many new daughter cells.	1
2	A student observes the process of regeneration in Planaria. The student claimed that the newly formed planarians have identical genome. Which statement support the claim?  (a) It is a single celled organism. (b) All planarians share the same genome. (c) Division in Planaria involves a single parent. (d) Planaria divides only under unfavourable condition.	1
3	The image shows the different parts of a flower. Which part of the pistil is responsible for receiving pollen from stamen in order to perform reproduction? (a) anther (b) ovary (c) petal (d) stigma 	1
	In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: (a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).	

	(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A). (c) Assertion (A) is true but reason (R) is false. (d) Assertion (A) is false but reason (R) is true. (e) Both Assertion and Reason are false.	
4	Assertion : DNA copying is necessary during reproduction. Reason : DNA copying leads to the transmission of characters from parents to offspring.	1
5	Assertion : An embryo is formed from fertilized egg. Reason : A monocot embryo comprises embryonal axis with two cotyledons.	1
6	Name the information source of making proteins in the cell. State two basic events in reproduction.	2
7	Name the hormones responsible for secondary sexual characters in (i) Girls (ii) Boys.	2
8	List two functions of ovary of human female reproductive system.	2
9	What happens when (a) Planaria gets cut into two pieces? (b) A mature Spirogyra filament attains considerable length? (c) On maturation sporangia burst?	3
10	What is meant by pollination? Name and differentiate between the two modes of pollination in flowering plants.	3
11	Suggest three contraceptive methods to control the size of human population which is essential for the health and prosperity of a country. State the basic principle moved in each.	5
12	(a) Name the human male reproductive organ that produces sperms and also secretes a hormone. Write the functions of the secreted hormone. (b) Name the parts of the human female reproductive system where (i) fertilisation takes place, (ii) implantation of the fertilised egg occurs.	5
13	In human females, what happens when (i) egg is fertilised (ii) egg is not fertilised?	5
14	List four points of significance of reproductive health in a society. Name any two areas related to reproductive health which have improved over the past 50 years in our country.	3

Answer key

<table>
<tr><td>Q.No:</td><td>Questions</td></tr>
<tr><td>1</td><td>(b) The cell divides multiple times giving rise to many daughter cells.</td></tr>
<tr><td>2</td><td>(c) Division in Planaria involves a single parent.</td></tr>
<tr><td>3</td><td>(d) stigma</td></tr>
<tr><td></td><td>In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as:
(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
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<tr><td>4</td><td>(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).</td></tr>
<tr><td>5</td><td>(c) Assertion (A) is true but reason (R) is false.</td></tr>
<tr><td>6</td><td>The DNA in the cell nucleus is the information source of making proteins. The two basic events in reproduction are: (i) creation of a DNA copy (ii) function of additional cellular apparatus by the cell, involved in the process.</td></tr>
<tr><td>7</td><td>Name the hormones responsible for secondary sexual characters in (i) Girls (ii) Boys.</td></tr>
<tr><td>8</td><td>Functions of ovary are— (i) production of female gamete, ovum. (ii) secretion of female sex hormones estrogen and progesterone.</td></tr>
<tr><td>9</td><td>(a) When Planaria gets cut into two pieces, each piece grows into a complete organism. (b) A mature Spirogyra on attaining considerable length breaks up into two or more small pieces. Each piece then grows into a new individual. (c) When sporangia bursts, spores are released, each one of which develop into new individual.</td></tr>
<tr><td>10</td><td>Pollination is the transfer of pollen grains from the anther of a stamen to the stigma of a carpel. The two modes of pollination are self pollination and cross pollination.
<table>
<tr><th>Self-pollination</th><th>Cross-pollination</th></tr>
<tr><td>(i) Self-pollination occurs within a flower or between two flowers of the same plant.</td><td>(i) Cross-pollination occurs between two flowers borne on different plants of the same species.</td></tr>
<tr><td>(ii) Flowers do not depend on other agencies for pollination.</td><td>(ii) Agents such as insects, water and wind are required for pollination.</td></tr>
<tr><td>(iii) Pollen grains are produced in small numbers.</td><td>(iii) Pollen grains are produced in large numbers.</td></tr>
</table></td></tr>
<tr><td>11</td><td>Three contraceptive methods that can be used to control the size of human population are— • Mechanical barrier method: In this method, physical devices such as condoms are used. The principle used is that it prevents entry of sperm into the female genital tract during copulation and thus acting as a barrier between them. • Chemical method: In this method, specific drugs are used by females which are of two types-oral pills and vaginal pills. The principle used is that it contains hormones</td></tr>
</table>

	which stop the ovaries from releasing ovum into the fallopian tube. • Surgical method: In this method, a small portion of vas deferens in male and the fallopian tube in female is surgically removed or tied. Principle used is that meeting of sperm and egg in the fallopian tube is prevented.
12	(a) Sperms are produced by testes in male reproductive system. Testes also secrete male sex hormone, called testosterone. Testosterone brings about changes in appearance in boys at the time of puberty. (b) (i) Fertilisation occurs in fallopian tube. (ii) Implantation of fertilized egg takes place in the uterus.
13	: The lining of uterus becomes thick and spongy before release of an egg. (i) If the egg is fertilized, it moves upto uterus and get implanted on uterus. The uterine wall thickens and richly supplied with blood. The region between embryo and uterine wall grows into placenta which provides nourishment and oxygen to the embryo. The child is borne as a result of rhythmic contraction of the uterine muscle. (ii) If the egg is not fertilized, the thick and nourishing lining of the uterus breaks and comes out through vagina as blood and mucus which is called menstruation.
14	(i) The mother carrying a child should be physically matured. (ii) The mother should be mentally fit to take care of the child. (iii) There should be at least 3 years gap between 2 children. (iv) Nutritious food should be available to the mother during pregnancy and during lactation period.