



INDIAN SCHOOL AL WADI AL KABIR

Class: X	DEPARTMENT OF SCIENCE 2020 – 2021 SUBJECT : BIOLOGY	Date of completion: 16.04.2020
Worksheet No: 2A	Topic: HOW DO ORGANISMS REPRODUCE? (Asexual Reproduction in Single Organisms)	A4 FILE FORMAT (PORTFOLIO)
CLASS & SEC:	NAME OF THE STUDENT:	ROLL

I OBJECTIVE TYPE QUESTIONS

1. A feature of reproduction that is common to Amoeba, Yeast and Spirogyra is that:
 - (a) they reproduce asexually
 - (b) they are all unicellular
 - (c) they reproduce only sexually
 - (d) they are all multicellular
2. The asexual reproduction in the Spirogyra involves:
 - (a) Breaking up of filaments into smaller bits
 - (b) Division of a cell into many cells
 - (c) Division of a cell into two cells
 - (d) Formation of a large number of buds
3. Vegetatively propagated plants
 - (a) do not bear roots
 - (b) do not bear buds
 - (c) are genetically similar
 - (d) are genetically dissimilar
4. Bryophyllum can be vegetatively propagated by
 - (a) Stem
 - (b) Leaf
 - (c) Flower
 - (d) Root
5. The process of the division of cell into several cells during reproduction in Plasmodium is termed as:
 - (a) Fragmentation
 - (b) Budding
 - (c) Multiple fission
 - (d) Binary fission

6. In a potato, vegetative propagation takes place by:

- (a) Stem tuber
- (b) Leaf
- (c) Grafting
- (d) Root tuber

7. Plants like banana, rose, jasmine, orange have lost the capacity to produce

- (a) Buds
- (b) Seeds
- (c) Flower
- (d) Roots

8. Select two plants raised by the method of natural vegetative propagation from the plants given below:

Wheat, banana, tomato, jasmine, gram, rose

9. The production of new plant from the roots, stem or leaves is called

10. The process reproduction involving only one cell or parent is called.....

Assertion & Reasoning

A) If both, Assertion and Reason are true and the Reason is the correct explanation of the Assertion.

B) If both, Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C) If Assertion is true but the Reason is false.

D) If both, Assertion and Reason are false.

11. **Assertion:** In multi-cellular organisms with relatively simple body organisation, simple reproductive methods can still work.

Reasoning: The reason is that many multi-cellular organisms, as we have seen, are not simply a random collection of cells.

12. **Assertion:** The spores are covered by thick walls.

Reasoning: They protect them until they come into contact with another moist surface and can begin to grow.

II. VERY SHORT ANSWER TYPE QUESTIONS CARRYING 1 MARK EACH

13. What is the basic difference between asexual and sexual reproduction?

14. What is the most common type of asexual reproduction in Amoeba/unicellular organisms?

15. What happens if a Planaria is cut into two or three pieces?

16. Name the structure where spores are produced?

17. Why regeneration is not considered a general method of reproduction?

III. SHORT ANSWER TYPE QUESTIONS CARRYING 3 MARKS EACH

18. (i) What are the two main types of reproduction in living organisms?

(ii) Classify the following under these two types:

Amoeba, Earthworm, Yeast, Frog.

19. Diagrammatically, show binary fission taking place in Amoeba.
20. What is vegetative propagation? List any two methods of artificial vegetative propagation. Name the method used in propagating (i) Rose and (ii) Guava
21. How is regeneration carried out in multicellular animals like Hydra?
22. With the help of an experiment demonstrate how new plants arise from buds in vegetative propagation.

IV. LONG ANSWER TYPE QUESTIONS CARRYING 5 MARKS EACH

23. Explain budding in hydra along with a diagram?
24. Enumerate the steps in the production of new plants through micro propagation or tissue culture. What is its significance?
25. What is fission in relation to reproduction? Describe the different types.
26. Why are budding, fragmentation and regeneration considered as asexual types of reproduction? With the help of neat diagrams explain the process of regeneration in Planaria.
27. (i) What is spore formation?
(ii) Draw a diagram showing spore formation in Rhizopus.
(iii) List two advantages for organisms which reproduce through spores.

V. BOARD BASED QUESTIONS:

28. Write one main difference between asexual and sexual mode of reproduction. Which species is likely to have comparatively better chances of survival – the one reproducing asexually or the one reproducing sexually? Give reason to justify your answer. (2019) (3marks)
29. How do Plasmodium and Leishmania reproduce? Write one difference in their mode of reproduction. (2014) (2 marks)
30. List in tabular form the two differences between asexual and sexual mode of reproduction. Name and explain with the help of labelled diagram the process by which Hydra reproduces asexually. (2014) (5 marks)

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