

CLASS : X (CBSE)

WORKSHEET-1

SUBJECT : BIOLOGY

NAME OF THE STUDENT:

SEC:

ROLL NO.

DATE:

15. Our environment revision question

Multiple Choice Questions .

1. Which one of the following is an artificial ecosystem?
 (a) Pond (b) Crop field (c) Lake (d) Forest
2. In a food chain, the third trophic level is always occupied by
 (a) carnivores (b) herbivores (c) decomposers (d) producers
3. An ecosystem includes
 (a) all living organisms (b) non-living objects
 (c) both living organisms and non-living objects
 (d) sometimes living organisms and sometimes non-living objects
5. In the given food chain, suppose the amount of energy at fourth trophic level is 5 kJ, what will be the energy available at the producer level? Grass — Grasshopper — Frog > Snake — Hawk of
 (a) 5k] o (b) 50k] © (c) 500k] o (d) 5000 kJ
6. Accumulation of non-biodegradable pesticides in the food chain in increasing amount at each higher trophic level is known as
 (a) eutrophication (b) pollution (c) bio magnifications (d) accumulation
7. Depletion of ozone is mainly due to
 (a) chlorofluorocarbon compounds (b) carbon monoxide
 (c) methane (d) pesticides
8. Organisms which synthesise carbohydrates from inorganic compounds using radiant energy are called
 (a) decomposers (b) producers o (c) herbivores (d) camivores
9. In an ecosystem, the 10% of energy available for transfer from one trophic level to the next is in the form of
 (a) heat energy (b) light energy (c) chemical energy (d) mechanical energy
10. Organisms of a higher trophic level which feed on several types of organisms belonging to a lower trophic level constitute the
 (a) food web (b) ecological pyramid 2 (c) ecosystem (d) food chain
11. Flow of energy in an ecosystem is always
 (a) unidirectional (b) bidirectional 2 (c) multi directional (d) no specific direction
11. Excessive exposure of humans to U V-rays results in
 (i) damage to immune system
 (ii) darmage to lungs
 (iii) skin cancer
 (iv) peptic ulcers

- (a) (i) and (ii) o (b) (ii) and (iv) 2 (c) (i) and (iii) (d) (iii) and (iv)
12. In the following groups of materials, which group (s) contains only non-biodegradable items?
 (i) Wood, paper, leather (ii) Polythene, detergent, PVC
 (iii) Plastic, detergent, grass (iv) Plastic, bakelite, DDT ©
 (a) (iii) (b) (iv) o (c) (i) and (iil) (d) (ii) and (iv)
13. Which of the following limits the number of trophic levels in a food chain?
 (a) Decrease in energy at higher trophic levels (b) Difficient food supply
 (c) Polluted air (d) Water
14. Which of the statement is incorrect?
 (a) All green plants and blue green algae are producers
 (b) Green plants get their food from organic compounds
 (c) Producers prepare their own food from inorganic compounds
 (d) Plants convert solar energy into chemical energy
15. Which group of organisms are not constituents of a food chain? (1) Grass, lion, rabbit, wolf
 (i) Plankton, man, fish, grasshopper (ii) Wolf, grass, snake, tiger
 (iii) Frog, snake, eagle, grass, grasshopper
 (a) (1) and (it) (b) (iii) and (iv) (c) (il) and (i) (d) (i) and (iv)
16. The percentage of solar radiation absorbed by all the green plants for the process of photosynthesis is about
 (a) i% (b) 5% (c) 8% (d) 10%
17. What will happen if deer is missing in the food chain given below? Grass + Deer — Tiger o
 (a) The population of tiger increases (b) The population of grass decreases
 (c) Tiger will start eating grass
 (d) The population of tiger decreases and the population of grass increases
18. The decomposers in an ecosystem
 (a) convert inorganic material, to simpler forms
 (b) convert organic material to inorganic forms
 (c) convert inorganic materials into organic compounds
19. Do not breakdown organic compounds19.
 If a grass hopper is eaten by a frog, then the energy transfer will be fram
 (a) producer to decomposer (b) producer to primary consumer
 (c) primary consumer to secondary consumer (d) secondary consumer to primary consumer 2a.
20. Disposable plastic plates should not be used because

- (a) they are made of materials with light weight
- (b) they are made of toxic materials
- (c) they are made of biodegradable materials
- (d) they are made of non-biodegradable materials

Short Answer Type Questions

1. Is improper disposal of waste a curse to environment?
2. Write the common food chain of a pond ecosystem.
3. What are the advantages of cloth bags over plastic bags during shopping?
4. Why are crop fields known as artificial ecosystems?
5. Differentiate between biodegradable and non-biodegradable substances. Cite examples. Suggest one word for each of the following statements/ definitions
 - (a) The physical and biological world where we live in
 - (b) Each level of food chain where transfer of energy takes place
 - (c) The physical factors like temperature, rainfall, wind and soil of an ecosystem
 - (d) Organisms which depend on the producers either directly or indirectly for food
6. Explain the role of decomposers in the environment?
Select the mis-matched pair in the following and correct it.
 - (a) Biomagnification — Accumulation of chemicals at the successive trophic levels of a food chain
 - (b) Ecosystem — Biotic components of environment
 - (c) Aquarium — A man-made ecosystem
 - (d) Parasites — Organisms which obtain food from other living organisms
7. We do not clean ponds or lakes, but an aquarium needs to be cleaned. Why?

CLASS : X (CBSE)

WORKSHEET-2

SUBJECT : BIOLOGY

NAME OF THE STUDENT:

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8. How do Organisms y Reproduce?[exemplar revision questions-set-3]

Multiple Choice Questions

- In the list of organisms given below, those that reproduce by the asexual method are
 (i) banana
 (ii) dog
 (iii) yeast
 (iv) Amoeba
 (a) (i) and (iv) (b) (i), (iii) and (iv) (c) (iii) and (iv) (d) (ii), (iii) and (iv)
- In a flower, the parts that produce male and female gametes (germ cells) are
 (a) stamen and anther
 (b) filament and stigma
 (c) anther and ovary
 (d) stamen and style
- Which of the following is the correct sequence of events of sexual reproduction in a flower?
 (a) pollination, fertilisation, seedling, embryo
 (b) seedling, embryo, fertilisation, pollination
 (c) pollination, fertilisation, embryo, seedling
 (d) embryo, seedling, pollination, fertilisation
- Offspring formed by asexual method of reproduction have greater similarity among themselves because
 (i) asexual reproduction involves only one parent
 (ii) asexual reproduction does not involve gametes
 (iii) asexual reproduction occurs before sexual reproduction
 (iv) asexual reproduction occurs after sexual reproduction
 (i) and (ii) (b) (i) and (iii)
 (ii) and (iv) (d) (iii) and (iv)
- Characters transmitted from parents to offspring are present in (a) cytoplasm
 (b) ribosome
 (c) golgi bodies
 (d) genes
- Characters that are transmitted from parents to offspring during reproduction show
 (a) only similarities with parents
 (b) only variations with parents
 (c) both similarities and variations with parents
 (d) neither similarities nor variations
- A feature of reproduction that is common to Amoeba, Spirogyra and Yeast is that
 (a) they reproduce asexually
 (b) they are all unicellular
 (c) they reproduce only sexually
 (d) they are all multicellular
- In Spirogyra, asexual reproduction takes place by
 (a) breaking up of filaments into smaller bits
 (b) division of a cell into two cells
 (c) division of a cell into many cells
 (d) formation of young cells from older cells.
- The ability of a cell to divide into several cells during reproduction in Plasmodium is called
 (a) budding (b) reduction division (c) binary fission (d) multiple fission

10. The correct sequence of reproductive stages seen in flowering plants is
 - (a) gametes, zygote, embryo, seedling
 - (b) zygote, gametes, embryo, seedling
 - (c) seedling, embryo, zygote, gametes
 - (d) gametes, embryo, zygote, seedling
11. The number of chromosomes in parents and offsprings of a particular species remains constant due to
 - (a) doubling of chromosomes after zygote formation
 - (b) halving of chromosomes during gamete formation
 - (c) doubling of chromosomes after gamete formation
 - (d) halving of chromosomes after gamete formation
12. In Rhizopus, tubular thread-like structures bearing sporangia at their tips are called
 - (a) filaments
 - (b) hyphae
 - (c) rhizoids
 - (d) roots
13. Vegetative propagation refers to formation of new plants from
 - (a) stem, roots and flowers
 - (b) stem, roots and leaves
 - (c) stem, flowers and fruits
 - (d) stem, leaves and flowers
14. Factors responsible for the rapid spread of bread mould on slices of bread are
 - (i) large number of spores
 - (ii) availability of moisture and nutrients in bread
 - (iii) presence of tubular branched hyphae
 - (iv) formation of round shaped sporangia
 - (a) (i) and (iii)
 - (b) (ii) and (iv)
 - (c) (i) and (ii)
 - (d) (iii) and (iv)
15. Length of pollen tube depends on the distance between
 - (a) pollen grain and upper surface of stigma
 - (b) pollen grain on upper surface of stigma and ovule
 - (c) pollen grain in anther and upper surface of stigma
 - (d) upper surface of stigma and lower part of style
16. Which of the following statements are true for flowers?
 - (i) Flowers are always bisexual
 - (ii) They are the sexual reproductive organs
 - (iii) They are produced in all groups of plants
 - (iv) After fertilisation they give rise to fruits
 - (a) (i) and (iv)
 - (b) (ii) and (iii)
 - (c) (i) and (iii)
 - (d) (ii) and (iv)
17. Which among the following statements are true for unisexual flowers?
 - (i) They possess both stamen and pistil
 - (ii) They possess either stamen or pistil
 - (iii) They exhibit cross pollination
 - (iv) Unisexual flowers possessing only stamens cannot produce fruits
 - (a) (i) and (iv)
 - (b) (ii), (iii) and (iv)
 - (c) (iii) and (iv)
 - (d) (i), (iii) and (iv)
18. Which among the following statements are true for sexual reproduction in flowering plants?
 - (i) It requires two types of gametes
 - (ii) Fertilisation is a compulsory event
 - (iii) It always results in formation of zygote
 - (iv) Offspring formed are clones
 - (a) (i) and (iv)
 - (b) (i) and (ii)
 - (c) (i), (ii) and (iii)
 - (d) (i), (ii) and (iv)
19. In Figure 8.1, the parts A, B and C are sequentially
 - (a) cotyledon, plumule and radical
 - (b) plumule, radicle and cotyledon
 - (c) plumule, cotyledon and radical
 - (d) radicle, cotyledon and plumule
20. Offspring formed as a result of sexual reproduction exhibit more variations because
 - (a) sexual reproduction is a lengthy process
 - (b) genetic material comes from two parents of the same species
 - (c) genetic material comes from two parents of different species
 - (d) genetic material comes from many parents

21. Reproduction is essential for living organisms in order to
 - (a) keep the individual organism alive
 - (b) fulfill their energy requirement
 - (c) maintain growth
 - (d) continue the species generation after generation
22. During adolescence, several changes occur in the human body. Mark one change associated with sexual maturation in boys
 - (a) loss of milk teeth
 - (b) increase in height
 - (c) cracking of voice
 - (d) weight gain
23. In human females, an event that reflects onset of reproductive phase is
 - (a) growth of body
 - (b) changes in hair pattern
 - (c) change in voice
 - (d) menstruation
24. In human males, the testes lie in the scrotum, because it helps in the
 - (a) process of mating
 - (b) formation of sperm
 - (c) easy transfer of gametes
 - (d) all the above
25. Which among the following is not the function of testes at puberty?
 - (i) formation of germ cells
 - (ii) secretion of testosterone
 - (iii) development of placenta
 - (iv) secretion of estrogen

(a) and (ii) (b) (ii) and (iii) (c) (iii) and (iv) (d) (i) and (iv)
26. The correct sequence of organs in the male reproductive system for transport of sperms is
 - (a) testis — vasdeferens > urethra
 - (b) testis > ureter > urethra
 - (c) testis — urethra > ureter
 - (d) testis > vasdeferens — ureter
27. Which among the following diseases is not sexually transmitted?
 - (a) Syphillis
 - (b) Hepatitis
 - (c) HIV - AIDS
 - (d) Gonorrhoea

Short Answer Questions

1. In a bisexual flower inspite of the young stamens being removed artificially, the flower produces fruit. Provide a suitable explanation for the above situation.
2. Can you consider cell division as a type of reproduction in unicellular organism? Give one reason.
3. What is a clone? Why do offsprings formed by asexual reproduction exhibit remarkable similarity? Explain how, offspring and parents of organisms reproducing sexually have the same number of chromosomes?
4. Colonies of yeast fail to multiply in water, but multiply in sugar solution. Give one reason for this.
5. Why does bread mould grow profusely on a moist slice of bread rather than on a dry slice of bread?
6. Give two reasons for the appearance of variations among the progeny formed by sexual reproduction.
7. Would a Planaria cut vertically into two halves regenerate into two individuals? Complete Figure 8.2 D and E by indicating the regenerated regions.

8. From the internet, gather information about the chromosome numbers of five animals and five plants. Correlate the number with the size of organism and answer the following questions.
 - (a) Do larger organisms have more number of chromosomes /cells?
 - (b) Can organism with fewer chromosomes reproduce more easily than organisms with more number of chromosomes?
 - (c) More the number of chromosomes/cells greater is the DNA content. Justify.
9. In tobacco plant, the male gametes have twenty four chromosomes. What is the number of chromosomes in the female gamete?
10. What is the number of chromosomes in the zygote?
11. Why cannot fertilisation take place in flowers if pollination does not occur?
12. Is the chromosome number of zygote, embryonal cells and adult of a particular organism always constant? How is the constancy maintained in these three stages?
13. Where is the zygote located in the flower after fertilization?
14. Reproduction is linked to stability of population of a species. Justify the statement.
15. How are general growth and sexual maturation different from each other?
16. Trace the path of sperm during ejaculation and mention the gland and their functions associated with the male reproductive system.
17. What changes are observed in the uterus if fertilisation does not occur?
18. What changes are observed in the uterus subsequent to implantation of young embryo?
19. What are the benefits of using mechanical barriers during sexual act?
20. In the given Figure 8.3 label the parts and mention their functions
 - (a) Production of egg
 - (b) Site of fertilisation
 - (c) Site of implantation
 - (d) Entry of the sperms
21. What would be the ratio of chromosome number between an egg and its zygote? How is the sperm genetically different from the egg?

Long Answer Questions

1. Why are budding, fragmentation and regeneration all considered as asexual types of reproduction? With neat diagrams explain the process of regeneration in Planaria.
2. Write two points of difference between asexual and sexual types of reproduction. Describe why variations are observed in the offspring formed by sexual reproduction.
3. Distinguish between pollination and fertilisation. Mention the site and product of fertilisation in a flower.
4. Draw a neat, labelled diagram of a pistil showing pollen tube growth and its entry into the ovule.
5. Distinguish between a gamete and zygote. Explain their roles in sexual reproduction.
6. Draw the diagram of a flower and label the four whorls. Write the names of gamete producing organs in the flower.
7. What is placenta? Mention its role during pregnancy?
8. What are various ways to avoid pregnancy? Elaborate any one method.
9. How does fertilisation take place? Fertilisation occurs once in a month. Comment.
10. Reproduction is essentially a phenomenon that is not for survival of an individual but for the stability of a species. Justify.
11. Describe sexually transmitted diseases and mention the ways to prevent them.

CLASS : X (CBSE)

WORKSHEET-3

SUBJECT : BIOLOGY

NAME OF THE STUDENT:

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8. How do Organisms Reproduce?[revisitation question-set-2]

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21. In human females, an event that reflects onset of reproductive phase is
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 - (b) testis — urethra > ureter
 - (c) testis > vasdeferens — ureter
 - (d) none
 25. Which among the following diseases is not sexually transmitted?

(a) Syphillis (b) Hepatitis (c) HIV – AIDS (d) Gonorrhoea

CLASS : X (CBSE)

WORKSHEET-4

SUBJECT : BIOLOGY

NAME OF THE STUDENT:

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9. Heredity and Evolution

Multiple Choice Questions

1. Exchange of genetic material takes place in
 - (a) vegetative reproduction
 - (b) asexual reproduction
 - (c) sexual reproduction
 - (d) budding
2. Two pink coloured flowers on crossing resulted in 1 red, 2 pink and 1 white flower progeny. The nature of the cross will be
 - (a) double fertilisation
 - (b) self pollination
 - (c) cross fertilisation
 - (d) no fertilisation
3. Cross between a tall plant (TT) and short pea plant (tt) resulted in progeny that were all tall plants because
 - (a) tallness is the dominant trait
 - (b) shortness is the dominant trait
 - (c) tallness is the recessive trait
 - (d) height of pea plant is not governed by gene 'T' or 't'
4. Which of the following statement is incorrect?
 - (a) For every hormone there is a gene.
 - (b) For every protein there is a gene.
 - (c) For production of every enzyme there is a gene.
 - (d) For every molecule of fat there is a gene
5. If a round, green seeded pea plant (RR yy) is crossed with wrinkled, yellow seeded pea plant, (rr YY) the seeds produced in F₂ generation are
 - (a) round and yellow
 - (b) round and green
 - (c) wrinkled and green
 - (d) wrinkled and yellow
6. In human males all the chromosomes are paired perfectly except one. This/these unpaired chromosome is/are

(i) large chromosome	(ii) small chromosome	(iii) Y-chromosome	(iv) X-chromosome
(a) (i) and (ii)	(b) (iii) only	(c) (iii) and (iv)	(d) (ii) and (iv)
7. The maleness of a child is determined by
 - (a) the X chromosome in the zygote
 - (b) the Y chromosome in zygote
 - (c) the cytoplasm of germ cell which determines the sex
 - (d) sex is determined by chance
8. A zygote which has an X-chromosome inherited from the father will develop into a
 - (a) boy
 - (b) girl
 - (c) X- chromosome does not determine the sex of a child
 - (d) either boy or girl
9. Select the incorrect statement
 - (a) Frequency of certain genes in a population change over several generations resulting in evolution
 - (b) Reduction in weight of the organism due to starvation is genetically controlled
 - (c) Low weight parents can have heavy weight progeny
 - (d) Traits which are not inherited over generations do not cause evolution

10. New species may be formed if
 - (i) DNA undergoes significant changes in germ cells
 - (ii) chromosome number changes in the gamete
 - (iii) there is no change in the genetic material
 - (iv) mating does not take place

(a) (i) and (ii) (b) (i) and (iii) (c) (ii), (iii) and (iv) (d) (i), (ii) and (iii)
11. Two pea plants one with round green seeds (RRyy) and another with wrinkled yellow (rrYY) seeds produce F₁ progeny that have round, yellow (RrYy) seeds. When F₁ plants are selfed, the F₂ progeny will have new combination of characters. Choose the new combination from the following
12. Progeny will have new combination of characters. Choose the new combination from the following
 - (i) Round, yellow
 - (ii) Round, green
 - (iii) Wrinkled, yellow
 - (iv) Wrinkled, green

(a) (i) and (ii) (b) (i) and (iv) (c) (i) and (iii) (d) (i) and (iii)
13. A basket of vegetables contains carrot, potato, radish and tomato. Which of them represent the correct homologous structures?
 - (a) Carrot and potato
 - (b) Carrot and tomato
 - (c) Radish and carrot
 - (d) Radish and potato
14. Select the correct statement
 - (a) Tendril of a pea plant and phylloclade of Opuntia are homologous
 - (b) Tendril of a pea plant and phylloclade of Opuntia are analogous
 - (c) Wings of birds and limbs of lizards are analogous
 - (d) Wings of birds and wings of bat are homologous
14. The extinction of organism has occurred recently
 - (a) the extinction of organism has occurred thousands of years ago
 - (b) the fossil position in the layers of earth is not related to its time of extinction
 - (c) time of extinction cannot be determined
15. Of the following statements is not true with respect to variation?
 - (a) All variations in a species have equal chance of survival
 - (b) Change in genetic composition results in variation
 - (c) Selection of variants by environmental factors forms the basis of evolutionary processes.
 - (d) Variation is minimum in asexual reproduction
16. A trait in an organism is influenced by
 - (a) paternal DNA only
 - (b) maternal DNA only
 - (c) both maternal and paternal DNA
 - (d) neither by paternal nor by maternal DNA
17. Select the group which shares maximum number of common characters
 - (a) two individuals of a species
 - (b) two species of a genus
 - (c) two genera of a family
 - (d) two genera of two families
18. According to the evolutionary theory, formation of a new species is generally due to
 - (a) sudden creation by nature
 - (b) accumulation of variations over several generations
 - (c) clones formed during asexual reproduction
 - (d) movement of individuals from one habitat to another

19. From the list given below, select the character which can be acquired but not inherited
 - (a) colour of eye
 - (b) colour of skin
 - (c) size of body
 - (d) nature of hair
20. The two versions of a trait (character) which are brought in by the male and female gametes are situated on
 - (a) copies of the same chromosome
 - (b) two different chromosomes
 - (c) sex chromosomes
 - (d) any chromosome
21. Select the statements that describe characteristics of genes
 - (i) genes are specific sequence of bases in a DNA molecule
 - (ii) a gene does not code for proteins
 - (iii) in individuals of a given species, a specific gene is located on a particular chromosome
 - (iv) each chromosome has only one gene
 - (i) and (ii) (b) (i) and (iii)
 - (a) () and (iv) (d) (ii) and (iv)
22. In peas, a pure tall plant (TT) is crossed with a short plant (tt). The ratio of pure tall plants to short plants in F₂ is
 - (a) 16:8
 - (b) 3:1
 - (c) 16:1
 - (d) 16:3
23. The number of pair (s) of sex chromosomes in the zygote of humans is
 - (a) one
 - (b) two
 - (c) three
 - (d) four
24. The theory of evolution of species by natural selection was given by
 - (a) Mendel
 - (b) Darwin
 - (c) Morgan
 - (d) Lamarck
25. Some dinosaurs had feathers although they could not fly but birds have feathers that help them to fly. In the context of evolution this means that
 - (a) reptiles have evolved from birds
 - (b) there is no evolutionary connection between reptiles and birds
 - (c) feathers are homologous structures in both the organisms
 - (d) birds have evolved from reptiles
26. A basket of vegetables contains carrot, potato, radish and tomato. Which of them represent the correct homologous structures?
 - (e) Carrot and potato
 - (f) Carrot and tomato
 - (g) Radish and carrot
 - (h) Radish and potato
27. The extinction of organism has occurred recently
 - (i) the extinction of organism has occurred thousands of years ago
 - (j) the fossil position in the layers of earth is not related to its time of extinction
 - (k) time of extinction cannot be determined

Short Answer Questions

1. How is the sex of a newborn determined in humans?
2. Do genetic combination of mothers play a significant role in determining the sex of a new born?
3. Mention three important features of fossils which help in the study of evolution.
4. Do all the gametes formed in human females have an X chromosome?
5. In human beings, the statistical probability of getting either a male or female child is 50 : 50. Give a suitable explanation.
6. A very small population of a species faces a greater threat of extinction than a larger population. Provide a suitable genetic explanation.

7. What are homologous structures? Give an example. Is it necessary that homologous structures always have a common ancestor?
8. Does the occurrence of diversity of animals on earth suggest their diverse ancestry also? Discuss this point in the light of evolution.
9. Give the pair of contrasting traits of the following characters in pea plant and mention which is dominant and recessive
 (i) yellow seed (ii) round seed
10. Why did Mendel choose pea plant for his experiments?
11. A woman has only daughters. Analyse the situation genetically and provide a suitable explanation.

Long Answer Questions

1. Does geographical isolation of individuals of a species lead to formation of a new species? Provide a suitable explanation.
2. Bacteria have a simpler body plan when compared with human beings. Does it mean that human beings are more evolved than bacteria? Provide a suitable explanation.
3. All the human races like Africans, Asians, Europeans, Americans and others might have evolved from a common ancestor. Provide a few evidences in support of this view.
4. Differentiate between inherited and acquired characters. Give one example for each type.
5. Give reasons why acquired characters are not inherited.
6. Evolution has exhibited a greater stability of molecular structure when compared with morphological structures. Comment on the statement and justify your opinion.
7. Give the basic features of the mechanism of inheritance.
8. Give reasons for the appearance of new combinations of characters in the F₂ progeny.

CLASS : X (CBSE)

WORKSHEET-2

SUBJECT : BIOLOGY

NAME OF THE STUDENT:

SEC:

ROLL NO.

DATE:

16.MANAGEMENT OF NATURAL RESOURCES REVISION QUESTIONS-SET-1

Multiple Choice Questions

1. From the list given below pick the item that is not a natural resource
 (a) Soil (b) Water (c) Electricity (d) Air
2. The most rapidly dwindling natural resource in the world is
 (a) water (b) forests (c) wind (d) sunlight
3. The most appropriate definition of a natural resource is that it is a substance/commodity that is
 (a) present only on land (b) a gift of nature which is very useful to mankind
 (c) a man-made substance placed in nature (d) available only in the forest
4. The main cause for abundant coliform bacteria in the river Ganga is
 (a) disposal of unburnt corpses into water
 (b) discharge of effluents from electroplating industries
 (c) washing of clothes (d) immersion of ashes
5. The pH of water sample collected from a river was found to be acidic in the range of 3.5 -4.5, on the banks of the river were several factories that were discharging effluents into the river. The effluents of which one of the following factories is the most likely cause for lowering the pH of river water?
 (a) Soap and detergent factory (b) Lead battery manufacturing factory
 (c) Plastic cup manufacturing factory (d) Alcohol distillery
6. The pH range most conducive for life of fresh water plants and animals is
 (a) 5— 7.5 (b) 2.0 - 3.5 (c) 3.5 - 5.0 (d) 9.0-10.5
7. The three R's that will help us to conserve natural resources for long term use are
 (a) recycle, regenerate, reuse (b) reduce, regenerate, reuse
 (c) reduce, reuse, redistribute (d) reduce, recycle, reuse
8. Given below are a few statements related to biodiversity. Pick those that correctly describe the concept of biodiversity
 (i) Biodiversity refers to the different species of flora and fauna present in an area
 (ii) Biodiversity refers to only the flora of a given area
 (iii) Biodiversity is greater in a forest
 (iv) Biodiversity refers to the total number of individuals of a particular species living in an area .
 (a) (i) and (ii) (b) (ii) and (iv) (c) (i) and (iii) (d) (ii) and (iii)
9. Among the statements given below select the ones that correctly describe the concept of sustainable development
 (i) Planned growth with minimum damage to the environment
 (ii) Growth irrespective of the extent of damage caused to the
 (iii) Stopping all developmental work to conserve the environment
 (iv) Growth that is acceptable to all the stakeholders
 (a) (i) and (iv) (b) (ii) and (i) (c) (ii) and (iv) (d) (iii) only
10. In our country, vast tracts of forests are cleared and a single species of plant is cultivated. This practice promotes .
 (a) biodiversity in the area (b) monoculture in the area
 (c) growth of natural forest (d) preserves the natural ecosystem in the area
11. A successful forest conservation strategy should involve .
 (a) protection of animals at the highest trophic level . (b) protection of only consumers
 (c) protection of only herbivores
 (d) comprehensive programme to protect all the physical and biological components
12. The important message conveyed by the 'Chipbko Movement' is
 (a) to involve the community in forest conservation efforts
 (b) to ignore the community in forest conservation efforts

- (c) to cut down forest trees for developmental activities
 (d) government agencies have the unquestionable right to order destruction of trees in forests
13. In our country, there are attempts to increase the height of several existing dams like Tehri and Almati, dams across Narmada, Choose the correct statements among the following that are a consequence of raising the height of dams
- (i) Terrestrial flora and fauna of the area is destroyed completely
 (ii) Dislocation of people and domestic animals living in the area
 (iii) Valuable agricultural land may be permanently lost
 (iv) It will generate permanent employment for people
 (v) (a) (i) and (ii) (b) (i), (ii) and (iii)
 (c) (ii) and (iv) (d) (i), (iii) and (iv)
14. Expand the abbreviation GAP
 (a) Governmental Agency for Pollution Control (b) Gross Assimilation by Photosynthesis
 (c) Ganga Action Plan (d) Governmental Agency for Animal Protection
15. Select the incorrect statement
 (a) Economic development is linked to environmental conservation
 (b) Sustainable development encourages development for current generation and conservation of resources for future generations
 (c) Sustainable development does not consider the view points of stakeholders
 (d) Sustainable development is a long planned and persistent development
16. Which of the following is not a natural resource?
 (a) Mango tree (b) Snake (c) Wind (d) Wooden house
17. Select the wrong statement
 (a) Forests provide variety of products (b) Forests have greater plant diversity
 (c) Forests do not conserve soil (d) Forests conserve water
18. Arbari forests of Bengal is dominated by
 (a) Teak (b) Sal (c) Bamboo (d) Mangrove
19. Ground water will not be depleted due to
 (a) afforestation (b) thermal power plants
 (c) loss of forest, and decreased rainfall
 (d) cropping of high water demanding crops
20. Opposition to the construction of large dams is due to
 (a) social reasons (b) economic reasons
 (c) environmental reasons (d) all the above
21. Khadins, Bundhis, Aharas and Kattas are ancient structures that are examples for
 (a) grain storage (b) wood storage
 (c) water harvesting (d) soil conservation
22. Pick the right combination of terms which has no fossil fuel.
 (a) Wind, ocean and coal (b) Kerosene, wind and tide
 (c) Wind, wood, sun (d) Petroleum, wood, sun
23. Select the eco-friendly activity among the following
 (a) Using car for transportation (b) Using poly bags for shopping
 (c) Using dyes for colouring clothes (d) Using windmills to generate power for irrigation
24. It is important to make small check dams across the flooded gullies because they
 (i) hold water for irrigation
 (ii) hold water and prevent soil erosion (iii) recharge ground water
 (iii) hold water permanently
 (a) (i) and (iv) (b) (ii) and (iii) (c) (iii) and (iv) (d) (ii) and (iv)

Short Answer Type Questions

1. Prepare a list of five items that you use daily in the school. Identify from the list such items that can be recycled.
2. List two advantages associated with water harvesting at the community level.
3. In a village in Karnataka, people started cultivating crops all around a lake which was always filled with water. They added fertilisers to their field in order to enhance the yield. Soon they discovered that the waterbody was completely covered with green floating plants and fishes started dying in large numbers. Analyse the situation and give reasons for excessive growth of plants and death of fish in the lake.
4. What measures would you take to conserve electricity in your house?
5. Although coal and petroleum are produced by degradation of bio-mass, yet we need to conserve them. Why?
6. Suggest a few measures for controlling carbon dioxide levels in the atmosphere.

Long Answer Type Questions

1. In the context of conservation of natural resources, explain the terms reduce, recycle and reuse. From among the materials that we use in daily life, identify two materials for each category.
2. A list of five activities that you perform daily in which natural resources can be conserved or energy utilisation can be minimised.
3. Water conservation necessary? Give reasons.
4. Suggest a few useful ways of utilising waste water.
5. What is the importance of forest as a resource?
6. Why are the Arabari forests of Bengal known to be a good example of conserved forest?