

# **BIOLOGY**

# **BOOKS - BETOPPERS**

# ORGANISATION IN THE LIVING THINGS

Formative Worksheet

1. The cells are made of

A. organelles

- B. molecules
- C. atoms
- D. All



- **2.** The molecule of life is
  - A. Water
  - B. Oxygen

C. RNA

D. DNA

### **Answer:**



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**3.** Which of the following is true for molecular level of organisation?

A. Atoms ightarrow Molecules ightarrow Cells ightarrow

 ${\sf Compounds} \ \to \ {\sf Organelles}$ 

B. Cells ightarrow Organelles ightarrow Compounds

ightarrow Molecules ightarrow Atoms

C. Atoms ightarrow Molecules ightarrow Compounds

ightarrow Organelles ightarrow Cells

D. Molecules  $\; o\;$  Atoms  $\; o\;$  Compounds

ightarrow Organelles ightarrow Cells

### **Answer:**



<b>4.</b> The	the	smalle	st liv	ing ı	unit,	and	is	capabl	e
of per	form	ing all	the f	uncti	ions (	of life	e is	5	

- A. Cell
- B. Tissue
- C. Organ
- D. Organ system



- 5. Statement I: In unicellular organisms like
  Amoeba, Paramecium and bacteria, all the
  functions are carried out by the single cell.
  Statement II: In multicellular organisms, each
  cell has the ability to perform all the activities.
  - A. Statement I is true, Statement II is false.
  - B. Statement I is false, Statement II is true.
  - C. Both statements are true.
  - D. Both statements are false.



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- 6. In a tissue, cells.
  - A. have same shape
  - B. perform similar function
  - C. Both
  - D. None

#### **Answer:**

**7.** Which of the plant tissues is involved in protection?

A. Epidermal tissue

B. vascular tissue

C. ground tissue

D. all

**Answer:** 



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8. The function of vascular bundles is

A. protection

B. storage

C. supply of water

D. supply of food

### **Answer:**



9. The protective animal	tissue is	5
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- A. Epithelial tissue
- B. Connective tissue
- C. nervous tissue
- D. All



# 10. Largest organ of our body is

- A. Stomach
- B. Lungs
- C. Heart
- D. Skin

### **Answer:**



- 11. The internal organs of our body are
- (I) Heart (II) Ear (III) Lungs (IV) Nose (V)
  Liver(VI) Legs
  - A. I, II, III
  - B. II,III,IV
  - C. I,III,V
  - D. II, IV,VI



**12.** Which of the following is an organ system in plants

- A. Root system
- B. shoot system
- C. Digestive system
- D. nervous system

### **Answer:**



13. Which of the following is more comple	x?
---	----

- A. Population
- B. Biotic community
- C. Ecosystem
- D. Biosphere



**14.** The next higher level of organisation above the individual level is

- A. Population
- B. Biotic community
- C. Ecosystem
- D. Biosphere

#### **Answer:**



**15.** Statement - I: Individuals of populations of one species can breed among themselves only Statement-II: They do not breed with individuals of other species

A. Statement -I is true, Statement - II is false.

B. Statement - I is false, Statement - II is true.

C. Both statements are true.

D. Both statements are false.



- **16.** The next higher level of organisation above the population level is
  - A. Population
  - B. Biotic community
  - C. Ecosystem
  - D. Biosphere



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17. The biotic community in an area interacts with the non-living physical environment, and the two (i.e., the biotic community and the abiotic environment) together constitute the next higher level of organisation. This is termed as

A. Population

- B. Biotic community
- C. Ecosystem
- D. Biosphere



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# 18. Match the following

Column-1

- (1) Biotic
- (2) Abiotic

Column-2

- (p) soil
  - (q) plants
- (r) water
- (s) animals

- A. 1-p,r, 2-q,s
- B. 1-p, q, 2-r,s
- C. 1-q,s, 2-p,r
- D. 1-p,s, 2-q,r



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**19.** Which of the following is the component of biosphere?

- A. Hydrosphere
- B. Lithosphere
- C. Atmosphere
- D. All



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**20.** Which of the following components of a pond ecosystem is biotic in nature?

- A. Detritus
- B. Oxygen
- C. Algae
- D. Water



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**21.** Which of the following factors are biotic components of the ecosystem?

A. soils		
B. fungi		
C. rocks		
D. Minerals		
Answer:  Watch Video Solution		
22 and are the abiotic		
factors of the ecosystem. The information in		
which row completes the given statement?		

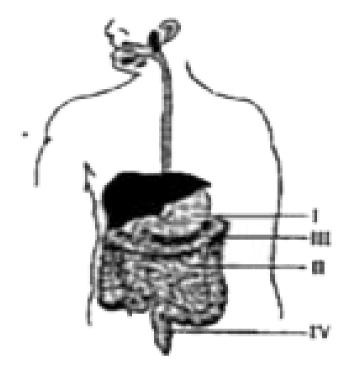
- A. i- Sunlight ii- Consumers
- B. i- wind ii- Decomposers
- C. i- Water ii-Soil
- D. i- Producers ii scanvengers



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**23.** The given diagram illustrates the human digestive system. Which part represents

# stomach?



A. I

B. II

C. III

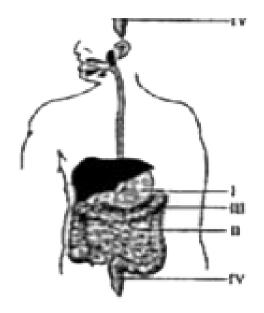
D. IV



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**24.** The given diagram illustrates the human digestive system. Which part represents small

# intestine?



A. I

B. II

C. III

D. IV



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# 25. Oesophagus is the part of

- A. Digestive system
- B. Reproductive system
- C. Excretory system
- D. Nervous system

#### **Answer:**

26. The topmost part of the digestive system is

A. Mouth

B. small intestine

C. Oesophagus

D. Anus

**Answer:** 



# 27. The food pipe is

- A. Stomach
- B. small intestine
- C. Oesophagus
- D. Anus

#### **Answer:**



**28.** Which of the following statements about cellular respiration in organism is true?

A. Oxygen is released during cellular respiration.

B. Cellular respiration leads to the formation of starch.

C. Cellular respiration leads to the formation of glucose.

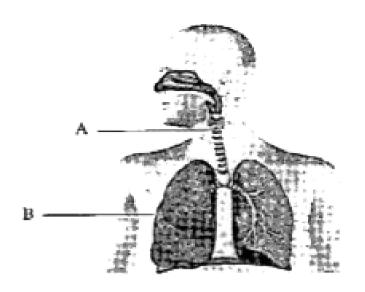
D. Carbon dioxide is released during cellular respiration.

### **Answer:**



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**29.** The given diagram illustrates the human respiratory system. Identify A and B.



A. A-Lungs, B- Trachea

B. A-Trachea, B- Lungs

C. A-Trachea, B- Bronchi

D. A-Bronchi, B-Trachea

#### **Answer:**



# **30.** Circulatory system includes

A. Heart

B. Blood

C. Blood vessels

D. All

### **Answer:**



# 31. Brain is the part of

- A. Digestive system
- B. Circulatory system
- C. Excretory system
- D. Nervous system

#### **Answer:**



## 32. Nervous system includes

I. Brain II. Spinal cord III. Heart IV. Ear V. Liver VI.

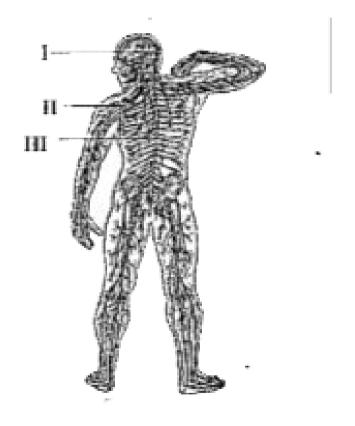
**Pancreas** 

- A. I,III ,V
- B. II,IV,VI
- C. I,II,IV
- D. I, III,IV

### **Answer:**



**33.** The given diagram illustrates the human nervous system. Identify spinal cord in the diagram.



- B. II
- C. III
- D. IV

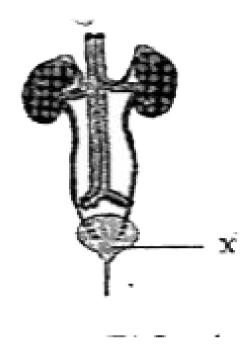


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**34.** The given illustration represents the human excretory system.

In the given illustration, the structure labelled

### X represents



A. kidney

B. ureter

C. urinary bladder

D. urethra



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**35.** What is the primary excretory product of humans?

- A. Ammonia
- B. Urea
- C. Glucose
- D. Starch



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- 36. Kidneys perform following functions except
  - A. Removal of body toxins
  - B. Supplying oxygen to body
  - C. Maintaining body salt balance
  - D. Filtering of wastes from the blood

**37.** This process of producing young ones of its own kind is called

A. Digestion

B. Reproduction

C. Excretion

D. Circulation

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38. The male reproductive cells are

A. eggs

B. ova

C. sperns

D. All

**Answer:** 



39.	The	female	e rep	oroductive	organ	is
-----	-----	--------	-------	------------	-------	----

- A. testis
- B. Ovary
- C. Both
- D. None



**40.** The skeletal system provides shape and rigidity to the body. It also helps in protecting a number of internal organs. Which of the following internal organs is not protected by the ribcage?

A. Heart

B. Liver

C. Lungs

D. Stomach

**41.** Which of the following statements about constituents of rib cage is correct?

A. Rib cage consists of chest bones only.

B. Rib cage protects stomach, lungs, and heart.

C. Vertebral column alone comprises rib cage.

D. Twelve ribs and backbone constitute rib cage.

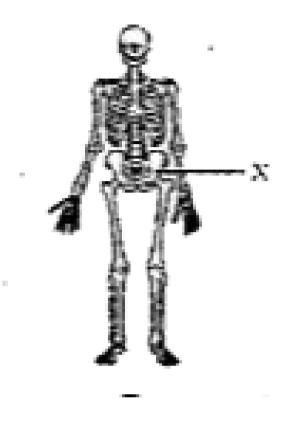
### **Answer:**



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**42.** The given figure represents the human skeletal system. In the given figure, label X

### represents the



A. skull

B. rib cage

C. shoulder bones

D. pelvic bones

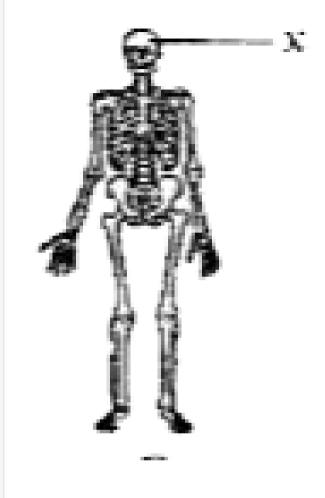
#### **Answer:**



**Watch Video Solution** 

**43.** The given figure represents the human skeletal system. In the given figure, label X

represents the



A. skull

B. rib cage

C. shoulder bones

D. pelvic bones

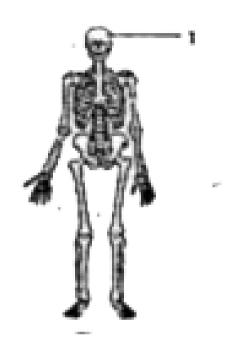
#### **Answer:**



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**44.** The given diagram illustrates the human skeleton. The structure labelled I in the given

# diagram illustrates the



A. ribs

B. skull

C. backbone

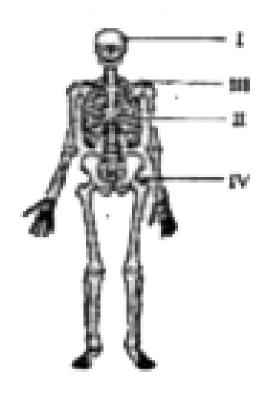
D. pelvic bones



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**45.** The given diagram illustrates the human skeleton. Pelvic bones in the given diagram are

# labelled as



A. I

B. II

C. III

D. IV

#### **Answer:**



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## **46.** Match the following columns

i Brain a Rib cage
ii Heart b Skull
iii Spinal cord c Backbone

A. i-a, ii-b, iii-c

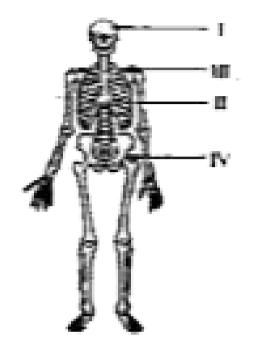
- B. i-b, ii-a, iii-c
- C. i-b, ii-c, iii-a
- D. i-c, ii-a, iii-b



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**47.** The given diagram illustrates the human skeleton. Which labelled structure helps in

# protecting the brain?



A. I

B. II

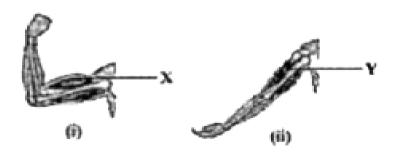
C. III

D. IV



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**48.** The given figure illustrates two arm muscles X and Y at two positions i and ii. During transition from i to ii,



A. only the relaxation of muscle Y takes place B. only the contraction of muscle X takes place C. relaxation of both muscles X and Y takes place D. contraction of both muscles X and Y takes place



# **Conceptive Worksheet**

1. All organisms are made of

A. cells

B. tissues

C. organs

D. organ system



**2.** The important compound, responsible for the transfer of characters from parents to children

A. Carbohydrates

**B. Proteins** 

C. Fats

D. DNA

- 3. The lowest level of a cellular organisation is
  - A. Cell
  - B. Tissue
  - C. organ
  - D. Organ system



<b>4.</b> The cell teams are
------------------------------

A. atoms

B. molecules

C. tissues

D. organs

### **Answer:**



### 5. The function of cortex is

- A. protection
- B. storage
- C. supply of water
- D. supply of food

#### **Answer:**



-	<b>_</b> •		•		_
6.	Tissues	comb	ine	to.	torm

A. organs

B. cells

C. organ system

D. None

#### **Answer:**



7.	Which	of	the	following	represents	the
or	gans of	hun				

- A. Stomach
- B. Lungs
- C. Heart
- D. All



- 8. The external organs of our body are
- (I) Heart (II) Ear (III) Lungs (IV) Nose (V) Liver (VI) Legs
  - A. I, II, III
  - B. II, III, IV
  - C. I, III, V
  - D. II,IV,VI



9.	Digestive	system	represents
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A. a cell

B. a tissue

C. an organ

D. an organ system

### **Answer:**



**10.** All the individuals of a single species existing in a given locality or area constitute a

- A. Population
- B. Biotic community
- C. Ecosystem
- D. Biosphere

#### **Answer:**



11. The populations of different species occurring in a locality constitute the next higher level of organisation called the

- A. Population
- B. Biotic community
- C. Ecosystem
- D. Biosphere

#### **Answer:**



12. Community has populations of species.					
A. same					
B. different					
C. both					
D. none					
Angwore					
Answer:					



<b>13.</b> Which of the	following	is an	example	for a	n
ecosystem?					

- A. Forest
- B. Desert
- C. Ponds
- D. All



14.	The	highest	level	of	organisation	in	the
livii	ng wo	orld is					

- A. Population
- B. Biotic community
- C. Ecosystem
- D. Biosphere



**15.** Consumers are organisms that are dependent on other organisms for food. Which of the following organisms is not a consumer?

- A. Cow
- B. Lion
- C. Plants
- D. Rabbit

#### **Answer:**



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Water video Solution

**16.** The following food chain exists in an enclosed forest region.

Plants  $\rightarrow$  Rabbit  $\rightarrow$  Fox

Which of these is a consequence of the excessive hunting of rabbit population by humans?

A. The plant population remains unaffected

B. The food chain remains unaffected

C. The fox population decreases

D. The fox population increases

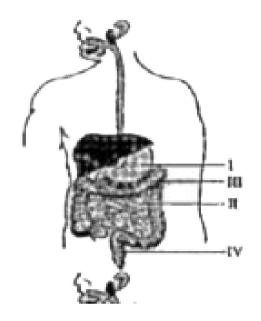
### **Answer:**



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**17.** The given diagram illustrates the human digestive system. Which part represents large

## intestine?



A. I

B. II

C. III

D. IV



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- 18. The lowest part of digestive system is
  - A. Stomach
  - B. small intestine
  - C. Oesophagus
  - D. Anus

#### **Answer:**



**19.** In general, the blood vessel that carry impure blood is

A. artery

B. vein

C. both

D. none

**Answer:** 



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**20.** Which of the following organ system transports gases and materials throughout the body?

A. Digestive system

B. Circulatory system

C. Excretory system

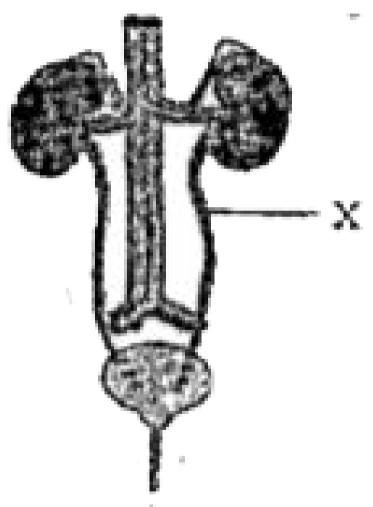
D. Nervous system

**Answer:** 

- 21. Spinal cord is the part of
  - A. Digestive system
  - B. Circulatory system
  - C. Excretory system
  - D. Nervous system



**22.** The given illustration represents the human excretory system



In the given illustration, the structure labelled						
X represents						
A. Kidney						
B. ureter						
b. di etei						
C. bladder						
D. urethra						
D. ureuna						
Answer:						
Watch Video Solution						

**23.** In human excretory system, the structure that helps in the storage of urine is

- A. Kidney
- B. ureter
- C. bladder
- D. urethra

### **Answer:**



- A. remove body waste
- B. digest food material
- C. pump blood to all body parts
- D. control different body movements



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25. The female reproductive cells are

A. eggs
B. ova
C. sperms
D. all
Answer:
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<b>26.</b> The male reproductive organ is
A. testis

- B. ovary
- C. Both
- D. None



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**27.** What is the long, hard structure that starts from the neck to the lower back of the body known as ?

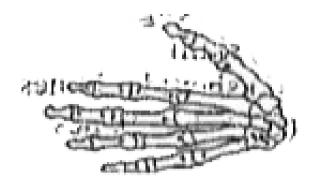
- A. Backbone
- B. Cartilage
- C. Pelvic bone
- D. Shoulder bone



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28. The given diagram illustrates a part of the human skeletal system. Which of the following functions is performed by the illustrated

image?

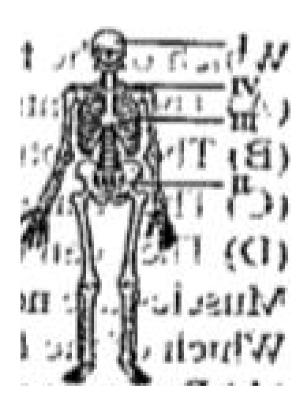


- A. Breathing
- B. Holding
- C. Running
- D. Sitting

### **Answer:**



**29.** The given diagram represents the human skeletal system. In the given figure, the shoulder bones are labelled as



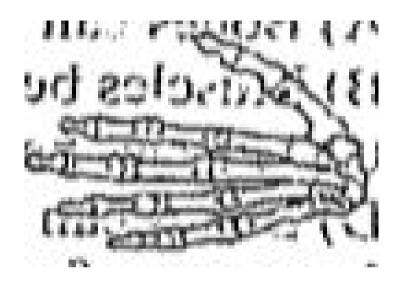
- A. I
- B. II
- C. III
- D. IV



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**30.** The given figure represents a part of the human skeletal system. The given figure

## represents the



A. bones of the hand

B. bones of the feet

C. rib cage

D. back bone



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**31.** The rib cage is a part of the skeletal system.

It performs the function of protecting the

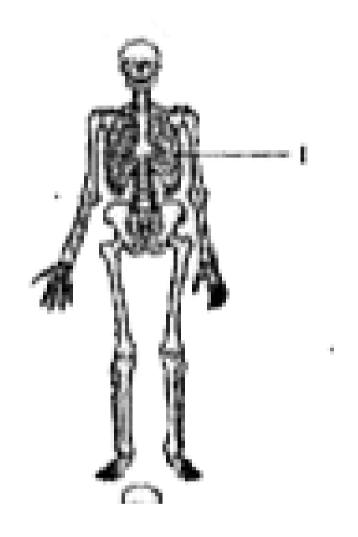
- A. heart and the lungs
- B. heart and the stomach
- C. heart and the stomach
- D. kidney and the stomach



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**32.** The given figure represents the human skeletal system. In the given figure, label I

represents the



A. rib cage

B. skull

C. shoulder bones

D. pelvic bones

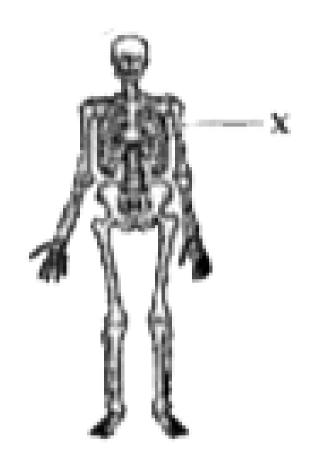
### **Answer:**



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**33.** The given figure represents the human skeletal system. In the given figure, label X

# represents the



A. rib cage

B. skull

C. shoulder bones

D. pelvic bones

## **Answer:**



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**34.** Which of the following statements about muscles is incorrect?

A. They contract to move à bone in a particular direction.

- B. They contract to bring a bone to its original position.
- C. They can only push the bone.
- D. They can only pull the bone.



**35.** Muscles are necessary for the movement of bones.

Which of the following statements is correct regarding contraction of muscles?

A. Bones can move in the absence of muscles.

B. Muscles become longer and thinner on contraction.

C. Muscles become shorter and thicker on contraction.

D. Bones can move in the presence of only one muscle.



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**36.** Humans perform a variety of activities, like running, walking, playing, lifting weights etc. They are able to do so because of organ system X. The organ system X referred to in the preamble is the

A. muscular system

B. digestive system

C. excretory system

D. circulatory system

**Answer:** 



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Summative Worksheet Multiple Choice Questions

1. The lowest level of cellular organisation is a

A. cell

C. tissue

D. organelle

### **Answer:**



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**2.** A group of similar cells which perform a particular function is called a

A. Organism

- B. Tissue
- C. Organelle
- D. Organs



- 3. Two organ systems in plants are
  - A. Roots and stern
  - B. Root system and shoot system

- C. Stem and branches
- D. All the above



- **4.** A level of organisation above the population is
  - A. Organism
  - B. Ecosystem

- C. Community
- D. Biosphere



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# **5.** Biosphere consists of

- A. Atmosphere, lithosphere and
  - hydrosphere.
- B. Atmosphere and hydrosphere

- C. Ecosystem only
- D. Abiotic and biotic components



- **6.** Biotic community consists of
  - A. Only animals
  - B. All organisms
  - C. Only plants

D. Organisms and the environment

### **Answer:**



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7. Trachea is a part of

A. Digestive system

B. Excretory system

C. Respiratory system

D. Circulatory system

#### **Answer:**



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- 8. Bones and cartilages are a part of
  - A. Skeletal system
  - B. Respiratory system
  - C. Muscular system
  - D. Excretory system

#### **Answer:**



### Summative Worksheet Ii Fill In The Blanks

**1.** The higher levels of organisation in a multicellular organism are ......

And ......



**2.** A group of cells that are similar in size and shape, and do the same job is called a ......



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3. Different tissues that work together form

•••••



**4.** An organ used to get rid of the wastes in our body is ......



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**5.** In plants, the organ that makes food is the.......



**6.** Individuals of the same kind of organisms

form a .....



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## Summative Worksheet Iii Differentiate Between The Following

1. Differentiate between the

Organism and Population



2. Differentiate between the

Population and Community



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3. Differentiate between the

Ecosystem and Biosphere



4. Differentiate between the

Tissues and Organs



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Summative Worksheet Iv Classify The Following As Ceils Tissues Organs Organ Systems Or Organisms

**1.** Classify as ceils, tissues, organs, organ systems or organisms:

Chlamydomonas



Leaf



**3.** Classify as ceils, tissues, organs, organ systems or organisms:

Stomach



Stem



5. Classify as ceils, tissues, organs, organ systems or organisms:

Shoot system





Skin

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**7.** Classify as ceils, tissues, organs, organ systems or organisms:

Amoeba



Blood



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**9.** Classify as ceils, tissues, organs, organ systems or organisms:

Flower



Bone



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Summative Worksheet V Name The Main Organs
Of The Following Systems

1. Name the main organs of the system

Digestive system

**2.** Name the main organs of the system Respiratory system



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**3.** Name the main organs of the system Circulatory system



**4.** Name the main organs of the system Nervous system



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**5.** Name the main organs of the system Excretory system



**Watch Video Solution** 

**6.** Name the main organs of the system Skeletal system



# Summative Worksheet Vii Answer The Following Questions

1. What is meant by

higher levels of organisation



2. What is meant by

lower levels of organisation?



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**3.** Arrange the following in an increasing order of their organisation. Also, complete the missing links in the hierarchy.

Cell, Organ, Community, Population, Biosphere



**4.** Mention the different levels of organisation in a multicellular organism.



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**5.** Explain the relationship between cells, tissues and organs.



6. Give the functions of system

Digestive system



**Watch Video Solution** 

7. Give the functions of system

Respiratory system



8. Give the functions of system

Circulatory system



**Watch Video Solution** 

**9.** Give the functions of system

Nervous system



10. Give the functions of system

Excretory system



**Watch Video Solution** 

11. Give the functions of system

Skeletal system



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Summative Worksheet Viii The Organs Of Various Systems Are Listed In The First Column Of The

## Chart Put A Tick In Any Of The Other Columns If The Organ Belongs To Any Of The Systems

1. The organs of various systems are listed in the first column of the chart. Put a tick in any of the other columns if the organ belongs to any of the systems.

ORGANS	SYSTEM						
	Digestive	Respiratory	Excretory	Reproductive	Circulatory	Norvous	Skalata
1. Vertebrae.		-	-	- aproductive	Circulatory	rici vous	Skeleta
2. Large intestine							_
3. Bladder							
4. Brain							
5. Nose					-		
6. Pancreas							
7. Liver							
8. Kidneys							<u> </u>
9. Spinal cord						-	
10. Lungs							
11. Heart							
12. Ureter							
13. Mouth					$\overline{}$	$\overline{}$	
14. Nerves		,	-				
15. Wind pipe					+		
16. Food pipe						$\overline{}$	
17. Bone			$\overline{}$	-		-	
18. Cartilage		-				-	



