

# Barishal Board 2016

## Biology

Subject Code 

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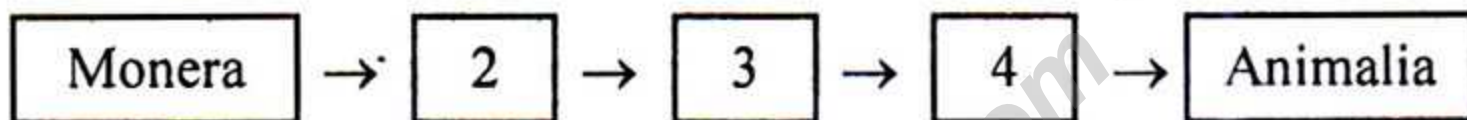
Times — 2 hours 10 minutes

Creative Essay Type

Full marks — 40

[N.B. — The figures in the right margin indicate full marks. Read the stems carefully and answer the associated questions. Answer any **four** questions.]

1. ★ Living world divided into five kingdom. Such as—



- a. Define body cell. 1
- b. What do you mean by involuntary muscle? 2
- c. Penicillium belongs to which kingdom in the stem—  
Explain. 3
- d. Analyse with logical causes of gradually advancement of  
kingdom in the stem. 4

2. ► Adnan's weight 50 kg, height 110 cm. He likes to take burger but not to do physical labour. That is why he often remain sick. When he goes to doctor he advised him to change food habit.

- a. Write full form of ATP. 1
- b. What do you mean by microelement of plant? 2
- c. Determine the BMI of Adnan. 3
- d. Doctor gave him that prescription evaluate this in respect  
of stem. 4

3. ►

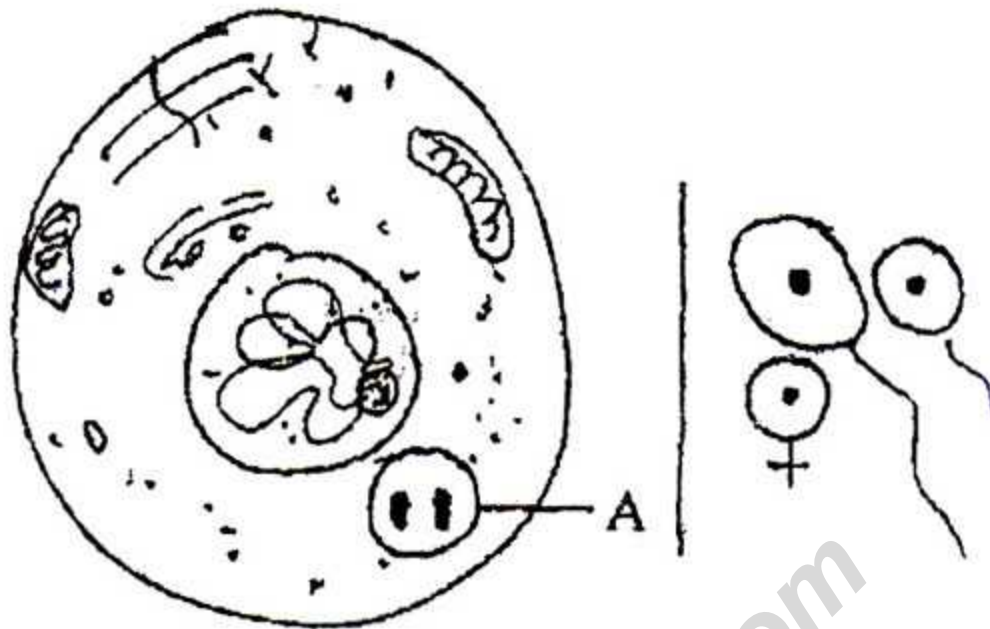


Fig : B

Fig : C

- a. Define classification. 1
  - b. What do you mean by lymphatic system? 2
  - c. Explain structure of marked part "A" in the stem. 3
  - d. In the stem being cell "B" and "C" evaluate with logic structural and functional dissimilarities. 4
4. ► Rahman wants to know from Jamal we receive that Oxygen how it ventilation into cell tissue. In respect of this Jamal inform to Rahman some organ and system of body perform this function properly.
- a. Define diffusion. 1
  - b. What do you mean by imbibition? 2
  - c. According to stem function of circulation occurs by which organ — Explain. 3
  - d. Subject-matter discussed by Rahman and Jamal occurs by many vessel. Explain it. 4

5. ★

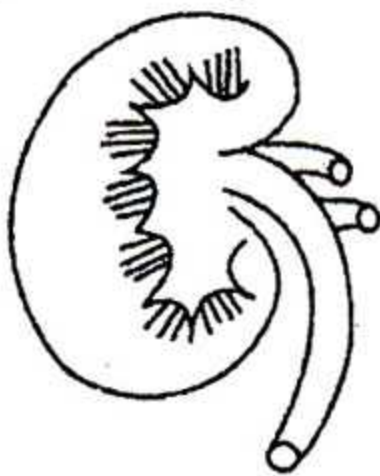


Fig : A

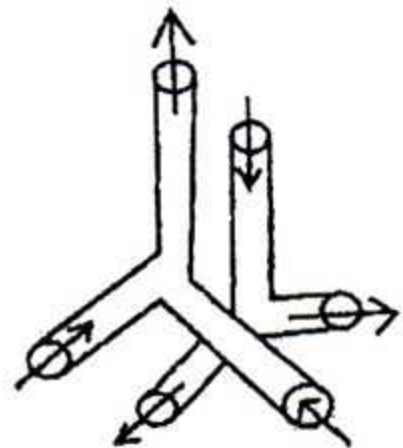
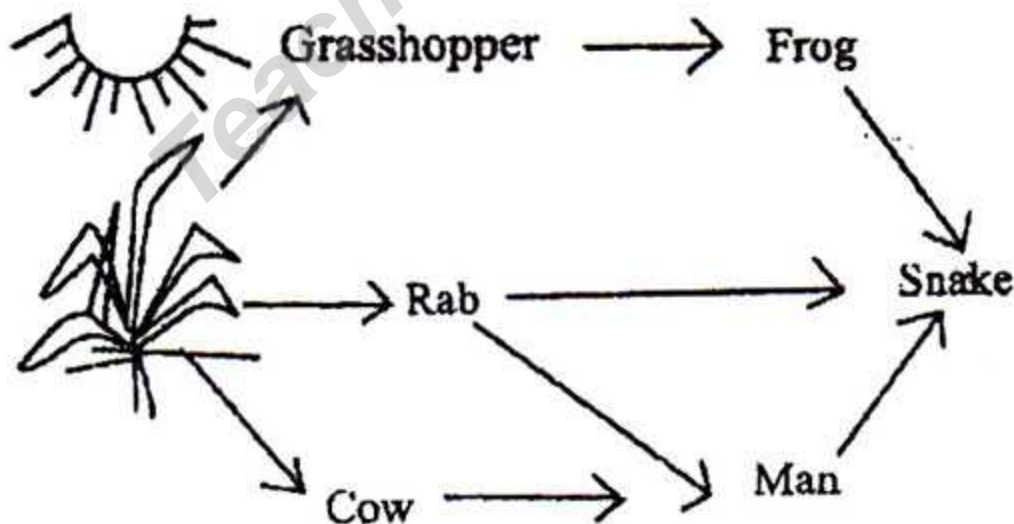


Fig : B

- Define blood pressure. 1
- Transpiration is a necessary evil— Explain. 2
- Explain structure of "S" in the stem. 3
- How does 'A' co-ordinate pure liquid connective tissue with body through 'B'? Analyse with logically. 4

6. ►



- Define consumer. 1
- What do you mean by species diversity? 2
- Which is the flow-chart in the stem? Explain. 3
- Various type of chain in flow-chart in the stem— Evaluate. 4



[NB. Answer all the questions. Each question carries one mark. Block fully, with a ball point pen, the circle of the letter that stands for the correct/best answer in the "Answer Sheet" for the Multiple Choice Questions Examination.]

1. **★** What is the name of enzyme of salivary juice?

- (a) Pepsin (b) Musin  
(c) Ptyalin (d) Trypsin

2. Which one is the example of curvature movement of plant?

- (a) Algae  
(b) Spore of fungi  
(c) Sexual reproductive cell of plant  
(d) Moves away of light of root

3. Bone joint of below—

- i.  
ii.  
iii.

Which one is correct?

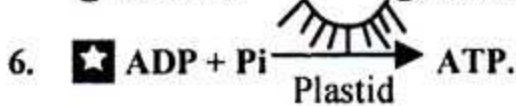
- (a) i and ii (b) i and iii  
(c) ii and iii (d) i, ii and iii

4. What is the name of membrane, which covered lung?

- (a) Pleura (b) Villi  
(c) Plasma lemma (d) Peritoneum

5. Feeling chest pain due to lack of blood circulation in heart is called—

- (a) Stroke (b) Angina  
(c) Anemia (d) Arthrosclerolosis



Which one is following above mentioned process?

- (a) Photolysis (b) Photosynthesis  
(c) Glycolysis  
(d) Photophosphorylation

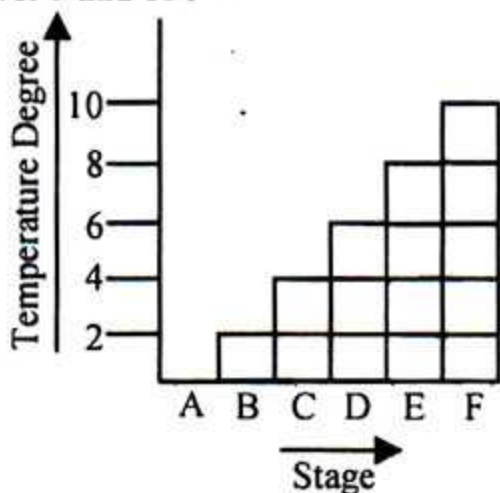
7. Blood group 'A' receive blood only from which group mentioned below?

- (a) B and O (b) Only A  
(c) A and O (d) A and B

8. Stroma is the part of—

- (a) Cell wall (b) Chloroplast  
(c) Mitochondria (d) Ribosome

Observe the following figure properly and give answer 9 and 10 :—



9. In which stage of flowchart flower initiate in germinating seed—

- (a) A (b) B

- (c) C (d) D

10. Which one is applicable for "F" initiating flower?

- i. Jhinga  
ii. Dhalia  
iii. Chandramollika

Which one is correct?

- (a) i and ii (b) i and iii  
(c) ii and iii (d) i, ii and iii

11. How much energy is reduced in energy stage of a energy pyramid?

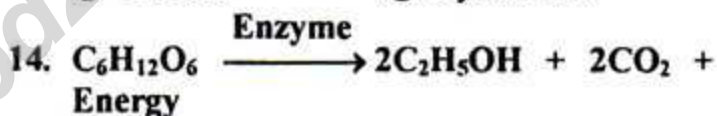
- (a) 50—60% (b) 60—70%  
(c) 70—80% (d) 80—90%

12. **★** Which microorganism disintegrates oil and hydrocarbon of environment immediately?

- (a) Escherichia Coli  
(b) Yeast  
(c) Bacillus bacteria  
(d) Pseudomonas

13. What type of cell division is found in yeast?

- (a) Mitosis (b) Amitosis  
(c) Meiosis (d) Cytokinesis



In which organism does this reaction happen?

- (a) Yeast (b) Grass  
(c) Mango tree (d) Deer

Answer the following questions accordance 15 and 16 with the stem :—

The height of Mr. Amzad 150 cm and weight 72 kg.

15. What is the BMI value of Mr. Amzad?

- (a) 32 (b) 34.9  
(c) 35 (d) 39.5

16. Which one is applicable for Mr. Amzad?

- i. Too much less body weight  
ii. To take food by selection  
iii. Should do regular exercise

Which one is correct

- (a) i and ii (b) i and iii  
(c) ii and iii (d) i, ii and iii

17. One the position of centromere, which one is not the shape of chromosome?

- (a) V (b) C  
(c) L (d) J

18. Functions of cholesterol are—

- i. In production of bile  
ii. In preparing vit-D  
iii. It keeps balance in neurons function

Which one is correct

- (a) i and ii (b) ii and iii  
(c) i and iii (d) i, ii and iii



19. Which scientific name is not written correctly?  
 (a) Artocarpus heterophyllus  
 (b) Nymphaea nouchali  
 (c) Copsychus saularis  
 (d) Homo sapiens

20. Which one has passed through the two neurons?  
 (a) Stimulation (b) Blood  
 (c) Hormone (d) Enzyme

21. Which helps to blooming flower?  
 (a) Auxin (b) Ethelene  
 (c) Flurigen (d) Cytokilnin

22. Which one is not the pathway of CO<sub>2</sub> reduction in green plants?  
 (a) Calvin cycle  
 (b) Watson & Crick cycle  
 (c) Hatch & Sack cycle  
 (d) Crassulacean Acid metabolism cycle

23. How many components are there in a polynucleotide of DNA?  
 (a) 1 (b) 2  
 (c) 3 (d) 4

Pay heed to the stem and answer to the questions No. 24 and 25 :—

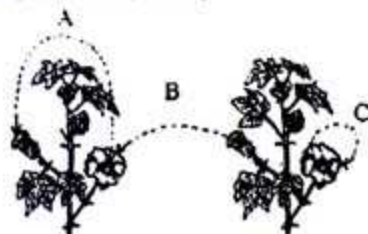


Figure-1

Figure-2

24. What is the type of the gamete that comes figure 1 from figure 2?  
 (a) Haploid (b) Diploid  
 (c) Triploid (d) Zygote

25. In the new plants creating through the "C" marked part of figure-2.

- i. Features of a species can be mentioned  
 ii. New varieties of plant emerge  
 iii. Ability of adaptation in the new plant is reduced

Which one is correct

- (a) i and ii (b) i and iii  
 (c) ii and iii (d) i, ii and iii

26. Members of CID have collected some hair as sample profile from the place of occurrence of crime. To identify the offender what will they with that sample.

- (a) DNA replication (b) RNA replication  
 (c) DNA test (d) RNA test

27. In the following which make the color of urine light Yellow?

- (a) Urea (b) Urechrome  
 (c) Uric acid (d) Creatinine

28. Due to the deposition of which substance the openings of seiveplats of phloem tissue

are being smaller?

- (a) Glucose (b) Enzyme  
 (c) Carbon-di-oxide (d) Callose

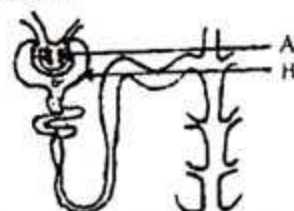
29. What is the named covering membrane of cartilage?

- (a) Osteoblast (b) Perichondrium  
 (c) Chondroblast (d) Chondro cyte

30. In human body how long time oxygen supply stop then death is confirm more than—

- (a) 3-4 minutes (b) 4-5 minutes  
 (c) 5-6 minutes (d) 6-7 minutes

Pay heed to the figure and answer the next 31 and 32 questions :



31. What is the type of blood that are found in the part 'A' of the figure?

- (a) Blood with CO<sub>2</sub>  
 (b) Blood without O<sub>2</sub>  
 (c) Blood with O<sub>2</sub>  
 (d) Blood with urine

32. The 'B' part of the figure is—

- i. Composed by epithelial tissue  
 ii. Remain engage infiltralian activity  
 iii. A part of renal corpuscle

Which one is correct

- (a) i and ii (b) ii and iii  
 (c) i and iii (d) i, ii and iii

33. The fur color of European or Asian bear is black. On the other hand that of polar region bear is white which type of biodiversity is it?

- (a) Ecosystem diversity  
 (b) Species diversity  
 (c) Genetic diversity  
 (d) Structural diversity

34. In which one recombinant DNA technology replaced?

- (a) To extract oil from jojoba  
 (b) To Develop BL rice  
 (c) To produce Chandramollika sapling  
 (d) To prepare scented Atar from jui suspension

35. Which one is the tertiary consumer of pond ecosystem?

- (a) Algae, Boal, Heron  
 (b) Shol, Frog & Vetki  
 (c) Vetki, Boal & Heron  
 (d) Prawn, Boal & Vetki

Note : The tertairy consumers of pond ecosystem are Algae, Boal, Vetki, Heron etc. So the correct answer will be a & c.

1	(b)	2	(d)	3	(c)	4	(c)	5	(b)	6	(d)	7	(c)	8	(c)	9	(a)	10	(c)	11	(b)	12	(c)	13	(d)	14	(a)	15	(a)	16	(c)	17	(b)	18	(d)	19	(c)	20	(d)	
21	(b)	22	(a)	23	(b)	24	(b)	25	(d)	26	(b)	27	(d)	28	*	29	(b)	30	(a)	31	(b)	32	(c)	33	(a)	34	(c)	35	(a)											