Biology Model Question Paper - 5

Question 1: When a fresh water protozoan is placed in marine water_______.
(A) the contractile vacuole disappears
(B) the contractile vacuole increases in size
(C) a number of contractile vacuoles appear
(D) the contractile vacuole remains unchanged

Answer: (A)

Question 2: A dorsal horn is present on the _______ of mulberry silk worm (caterpillar).
(A) 8th abdominal segment
(B) 5th abdominal segment
(C) 2nd thoracic segment
(D) Head

Answer: (A)

Question 3: A balanced diet does NOT include _______.
(A) Carbohydrates and fats
(B) Nucleic acids and enzymes
(C) Proteins and vitamins
(D) Minerals and salts

Answer: (B)

Question 4: To meet the demands of the society, in vitro production of a large number of plantlets in a short duration is practiced in floriculture and horticulture industry today. This is called_______.
(A) Soma clonal variation
(B) Hybridoma technology
(C) Micropropagation
(D) Somatic hybridization

Answer: (C)

Question 5: The term genetic RNA refers to
(A) the RNA that carries genetic message
(B) the RNA that helps gene regulation in lac-operon
(C) the RNA present in mitochondria
(D) none of the above

Answer: (A)
Question 6: When 2 to 3 drops of Benedict's reagent are added to a urine sample and heated gently, it turns yellow. This colour change indicates that ________.
(A) Urine contains 1.5% glucose
(B) Urine contains 2% glucose
(C) Urine contains 0.5th glucose
(D) Urine contains 1% glucose
Answer: (D)

Question 7: What will be the codons in m-RNA if the DNA codes are ATG-CAG?
(A) TAC – GTC
(B) UAC – GUC
(C) UCA – TUA
(D) TCA – GTC
Answer: (B)

Question 8: What is/are true about heart wood?
A. It does not help in water conduction.
B. It is also called alburnum.
C. It is dark in colour but very soft.
D. It has tracheary elements which are filled with tannin, resin, etc.
(A) A and D
(B) B and D
(C) A, B and C
(D) B, C and D
Answer: (A)

Question 9: What is a genophore?
(A) DNA in prokaryotes
(B) DNA and RNA in prokaryotes
(C) DNA and protein in prokaryotes
(D) RNA in prokaryotes
Answer: (B)

Question 10: Vitellogenesis occurs during the formation of
(A) Oogonial cell in the Graafian follicle
(B) Ootid in the fallopian tube
(C) Secondary Oocyte in the fallopian tube
(D) Primary oocyte in the Graafian follicle
Question 11: Tyloses are found in _______.
(A) secondary xylem
(B) secondary phloem
(C) sclerenchyma fibres
(D) sclereids
Answer: (A)

Question 12: Transpiration facilitates
(A) Opening of stomata
(B) Absorption of water by roots
(C) Excretion of minerals
(D) Electrolyte balance
Answer: (B)

Question 13: The World Intellectual Property Day is observed on _______.
(A) February, 29th
(B) June, 30th
(C) April, 26th
(D) September, 5th
Answer: (C)

Question 14: The types of ribosomes found in prokaryotic cell are ________.
(A) 100 S
(B) 80 S
(C) 60 S
(D) 70 S
Answer: (D)

Question 15: The term, ‘southern blotting’ refers to
(A) transfer of DNA fragments from in vitro cellulose membrane to electrophoresis gel
(B) attachment of probes to DNA fragments
(C) transfer of DNA fragments from electrophoresis gel to nitrocellulose sheet.
(D) comparison of DNA fragments from two sources
Answer: (C)