

Day: Tuesday

Date: 20/11/2018

Time: 08:00 am to 10.00 am

Max. Marks: 50

Note: 1) All questions are compulsory.

2) Section 'A' contains Q.1 to Q.3 of MCQ type of one mark each. Q.4 to Q.6 of very short answer (VSA) type of ONE mark each.

3) Section 'B' contains Q.7 to Q.11 of short answer (SA) type of TWO marks each. Internal choice is provided to one question.

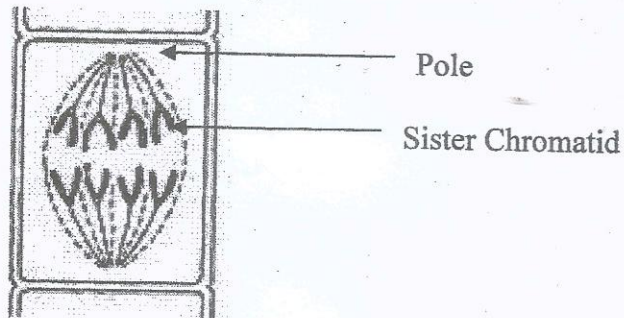
4) Section 'C' contains Q.12 to Q.19 of short answer (SA) type of THREE marks each. Internal choice is provided to one question.

5) Section 'D' contains Q.20 to Q.21 of long answer with FIVE marks and internal choice.

Section – A

Write the most appropriate answer from the given option:

- 1) Find the odd ONE out among the modifications of root. (1)
a) Climbing b) Epiphytic c) Prop d) Stilt
- 2) In phylum mollusca, the shell is secreted by _____. (1)
a) Foot b) Mantle c) Osphradia d) Radula
- 3) Which mitotic stage is represented in the given diagram? (1)



- 4) Write the functions of parenchyma. (1)
- 5) Can earthworm survive in dry weather? Why? (1)
- 6) Define the term 'Synapsis'. (1)

Section – B

- 7) Give the significance of meiosis. (2)
- 8) Define the term :1) Nutrition 2) Assimilation (2)
- 9) Write any two objectives of systematics. (2)
- 10) Write a short note on cardiac muscle fibres with respect to location and function. (2)
- 11) Distinguish between male and female *Ascaris*. (2)

OR

- 11) With which animal / phylum would you associate the following: (2)
a) Tube feet b) Flame cells
Mention the function of each of these in respective animals.

Section – C

- 12) Give the graphical representation of cell cycle. (3)
- 13) Neha has a list of fruits – Mango, Fig, Tomato, Custard apple, Pea & Pineapple. (3)
Help her to segregate them into simple, aggregate and composite fruits.
- 14) Give the distinguishing characters of phylum to which butterfly belongs. (3)
- 15) Write a note on stomach. Give the functions of sphincters. (3)
- 16) Briefly describe the various animal body plans. (3)
- 17) Differentiate between medullated and non – medullated nerve fibres. (3)
- 18) Explain the types of meristem based on their position. (3)
- 19) Give the economic importance of Lichens. (3)

OR

- 19) Describe the type of viruses. (3)

Section – D

- 20) Describe location, structure & function of smooth muscle fibres. (5)

OR

- 20) Describe location, structure & function of hyaline cartilage. (5)
- 21) What is phyllotaxy? Explain its types. (5)

OR

- 21) What is placentation? Describe its types. (5)

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