

70/2015

(Pages : 3)

Maximum : 200 marks

Time : 1½ hours

**PART I**

(Each answer shall be limited to one sentence)

**A. Choose the correct answer:**

1. Mulberry silk is produced by:

- |                                 |                              |
|---------------------------------|------------------------------|
| (a) <i>Samia Cynthia ricini</i> | (b) <i>Antheraea assamia</i> |
| (c) <i>Bombyx mori</i>          | (d) <i>Antheraea paphia</i>  |

2. Extra chromosomal circular DNA molecules found in bacteria is called:

- |             |            |
|-------------|------------|
| (a) Phasmid | (b) Cosmid |
| (c) Plasmid | (d) Probe  |

3. Red palm weevil is:

- |                               |                                      |
|-------------------------------|--------------------------------------|
| (a) <i>Opisina arenosella</i> | (b) <i>Rhynchophorus ferrugineus</i> |
| (c) <i>Aceria guerreronis</i> | (d) <i>Oryctes rhinoceros</i>        |

4. Larva of starfish is:

- |                |                 |
|----------------|-----------------|
| (a) Bipinnaria | (b) Auricularia |
| (c) Veliger    | (d) Trochophore |

5. The bacterium which is believed to play an active role in causing and aggravating peptic ulcer.

- |                               |                                |
|-------------------------------|--------------------------------|
| (a) <i>Escherichia coli</i>   | (b) <i>Helicobacter pylori</i> |
| (c) <i>Rickettsia mooseri</i> | (d) <i>Pasteurella pestis</i>  |

6. The theory of Neo-Lamarckism is depended on:

- |                                    |                   |
|------------------------------------|-------------------|
| (a) Variation                      | (b) Heredity      |
| (c) Mutation and natural selection | (d) None of these |

[P.T.O.]

7. The nature of blood is:
- |             |                   |
|-------------|-------------------|
| (a) Acidic  | (b) Alkaline      |
| (c) Neutral | (d) None of these |
8. The number of RNA polymerase found in eukaryotes is:
- |       |       |
|-------|-------|
| (a) 1 | (b) 2 |
| (c) 3 | (d) 4 |
9. The term cistron was coined by:
- |                    |             |
|--------------------|-------------|
| (a) Kuhne          | (b) Pasteur |
| (c) Walter Gilbert | (d) Benzer  |
10. The most important sugar concerned with human biochemistry is:
- |             |              |
|-------------|--------------|
| (a) Sucrose | (b) Glucose  |
| (c) Lactose | (d) Fructose |

**B. Fill up the blanks:**

11. Lichens are excellent indicators of \_\_\_\_\_ pollution.
12. Metal ion essential for blood coagulation is \_\_\_\_\_.
13. Endocytosis of solid substances is called \_\_\_\_\_.
14. Father of conditioned reflexes is \_\_\_\_\_.
15. Alkaptonuria is one of the inherent disorders with the metabolism of \_\_\_\_\_.
16. The venom of viper is \_\_\_\_\_ in action.
17. The hook worm disease is caused by \_\_\_\_\_.
18. The protein contained in the bee venom is \_\_\_\_\_.
19. A high grade collagen produced from the gas bladder of some fish called \_\_\_\_\_.
20. The number of cervical vertebrae generally present in mammals is \_\_\_\_\_.



21. \_\_\_\_\_ is the iron storing protein present in liver, spleen and bone marrow.
22. The initiation codon of eukaryotes is \_\_\_\_\_.
23. \_\_\_\_\_ is the disease of animals caused by fungal infection.
24. Study of the possibility of improving the human gene pool is known as \_\_\_\_\_.
25. A congenital disorder caused by trisomy of 21<sup>st</sup> chromosome is called \_\_\_\_\_.

**C. Write the full form of the following acronyms:**

26. BMR
27. GABA
28. MMR
29. SCID
30. MAB

**PART II**

(Each answer shall be limited to one paragraph)

31. Latent learning
32. IPM
33. CT scanning
34. Anorexia nervosa
35. Satellite DNA
36. Restriction endonucleases
37. Biosphere reserve
38. Parasitic castration

(8 × 10 = 80)