PART – A

1. The price of petrol increases by 25%. By what percentage must a customer reduce the consumption so that the earlier bill on the petrol does not alter?
   
   A) 20%  B) 25%  C) 30%  D) 33.33%

2. Which is the number that comes next in the following sequence?
   2, 6, 12, 20, 30, 42, 56, _____
   
   A) 60  B) 64  C) 72  D) 70

3. Four pipes can fill a reservoir in 15, 20, 30 and 60 hours respectively. The first one was opened at 6 AM, second at 7 AM, third at 8 AM and the fourth at 9 AM. When will the reservoir be filled?
   
   A) 11 AM  B) 1 PM  C) 1:30 PM  D) 12 Noon

4. The sum of the ages of two persons A and B is 50. Five years ago, the ratio of their ages was 5/3. The present ages of A and B are
   
   A) 40, 10  B) 38, 12  C) 35, 15  D) 30, 20

5. Synonym of PRECIPITATE is
   
   A) Hasten  B) Advance  C) Arrive  D) Instigate

6. Antonym of HAMPERED is
   
   A) Prompted  B) Relieved  C) Facilitated  D) Instigated

7. Synonym of ALLEVIATE is
   
   A) Eradicate  B) Remove  C) Understand  D) Lessen

8. Antonym of SPURIOUS is
   
   A) Fresh  B) Genuine  C) Modern  D) Specific
PART – B

26. The raw material for the commercial production of the steroid progesterone is
A) Naphthalene B) Disogenin C) Phenol D) All of the above

27. The end of the spinal cord is the segment
A) T₁₂ T₁₃ B) L₁₂ L₁₃ C) T₁₂ L₁ D) L₁ L₂

28. The functional unit of a kidney is
A) Nephron B) Neuron C) Medula D) Bowman’s Capsule

29. Blood flow through the heart can be measured by
A) Computer Aided Tomography B) Electroencephalogram C) Magnetic Resonance Imaging D) Doppler Echocardiography

30. The number of lobes seen in the right lung is
A) One B) Three C) Four D) Six

31. Which of the following virus has a double stranded RNA?
A) Rheo virus B) Rhabdo virus C) Retro virus D) Rhimino virus

32. The mosquito responsible for transmitting the dengue fever virus is
A) Anopheles mosquito B) Culex mosquito C) Aedes mosquito D) Asian Tiger mosquito

33. The primary immune response is shown by
A) IgM B) IgE C) IgD D) IgA

34. Human immunodeficiency virus is
A) Retro virus B) RNA virus C) DNA virus D) None of the above

35. The temperature recommended for sterilization by the autoclaving method is
A) 100°C B) 110°C C) 180°C D) 121°C

36. BCG vaccine is composed of
A) DNA of the bacteria B) Attenuated live bacteria C) Toxin extracted from the bacteria D) RNA of the bacteria

37. The reaction between an antigen and antibody is
A) Chemical reaction that is reversible B) Physical reaction that is irreversible C) Chemical reaction that is irreversible D) Physical reaction that is reversible

38. An obligate aerobe
A) Needs O₂ for its growth B) Needs CO₂ for its growth C) Is killed by O₂ D) None of the above

39. REM sleep is the stage characterized by
A) The onset of sleep with slow eye movement B) The EEG recordings of this stage tend to show characteristic “sleep spindles”, which are short bursts of high frequency brain activity C) Random movement of the eyes with low muscle tone throughout the body D) None of the above

40. The neurotransmitter on the post ganglionic parasympathetic nerves is
A) Dopamine B) Noradrenaline C) Adrenaline D) Acetylcholine

41. The amino acid which has an indole ring is
A) Tryptophan B) Histidine C) Arginine D) Lysine