



- Notes :
1. All question carry equal marks.
  2. Answer **three** question From Section A and **three** question from Section B.
  3. Assume suitable data wherever necessary.
  4. Use of pen Blue/Black ink/refill only for writing the answer book.

**SECTION – A**

1. a) Explain in detail with the help of neat sketch bore hole privy used in rural areas. 7  
b) Explain the following terms: 6  
i) Communicable Diseases. ii) Epidemic
2. a) Explain in detail the chemical and physical quality standards of swimming pool water. 7  
b) What are the methods of communicable diseases control. 6
3. a) Write in detail about swimming pool safety provision. 7  
b) Write in detail the life cycle of mosquito. 7
4. a) Write in detailed about food storage. 6  
b) State and explain the essential conditions for the growth of fly. 7
5. Explain the essential aspect to sanitation of Hospital. 13

**SECTION – B**

6. a) What are the materials that can be recovered for recycling from solid waste. 7  
b) What are the chemical properties of solid waste if it is used as fuel? Explain. 7
7. a) Distinguish between density separation and magnetic separation. 7  
b) What are the sources and locations of solid waste generation. 6
8. Explain the mechanical method of composting & draw flow chart for the mechanical compost plant. How will you decide the suitability of this plant? 13
9. The following average speeds were obtained for various round trip distances to a disposal site. Find haul speed constant 'a' and 'b' and round trip haul time for a site located 11.00 km away. 13

Round trip distance (x) km/trip	2	5	8	12	16	20	25
Avg. haul speed (y) km/hr	17	28	32	36	40	42	45

10. a) Explain in detail the factors affecting composting process. 6  
b) Explain the structural and settlement characteristics of land fills. 7

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