SYNTHETIC FIBRES AND PLASTICS

1. The first fully man made fiber was:
   (A) Polyester.  (B) Acrylic.  (C) Rayon.  (D) Nylon.

2. Rayon is obtained by chemical treatment of
   (A) Paper  (B) Wood pulp  (C) Fruit pulp  (D) Any of these

3. Which of the following is not a synthetic fiber?
   (A) Nylon  (B) Acrylic  (C) Rayon  (D) Cotton

4. Which of the following is a polyester fiber
   (A) Rayon.  (B) Terelene.  (C) Nylon.  (D) Acrylic.

5. Synthetic fiber which resembles with wool is:
   (A) Nylon.  (B) Polycot.  (C) Polytester.  (D) Acrylic.

6. Which of the following is/are a man-made fiber?
   (A) Acrylic.  (B) Nylon.  (C) Rayon.  (D) All of these.

7. The synthetic fiber also known as artificial silk:
   (A) Rayon.  (B) Acrylic.  (C) Nylon.  (D) PET.

8. Parachutes and ropes for climbing mountain are made of:
   (A) Rayon.  (B) Polyester.  (C) Acrylic.  (D) Nylon.

9. Which of the following is non-biodegradable?
   (A) Paper.  (B) Wood.  (C) Tin can.  (D) Woolen clothes.

10. Cotton is polymer of:
    (A) Fructose.  (B) Cellulose.  (C) Maltose.  (D) Sucrose.
11. Clothes made of which of the following fabric must not be worn by you while working in laboratory?

(A) Jute.  
(B) Acrylic.  
(C) Polyester.  
(D) Cotton.

12. A common form of polyester is:

(A) Acrylic.  
(B) Nylon.  
(C) Rayon.  
(D) Terelene.

13. Polyester is made of repeating units of chemical called as:

(A) Ether.  
(B) Ester.  
(C) Acid.  
(D) Cotton.

14. Fabric polycot is prepared by mixing:

(A) Polyester with wool.  
(B) Polyester with acrylic.  
(C) Polyester with cotton.  
(D) Polyester with nylon.

15. Which of the following is not a characteristic of synthetic fibers?

(A) Synthetic fibers are cheap.  
(B) Synthetic fibers dry up quickly.  
(C) Synthetic fibers are durable.  
(D) Synthetic fibers are difficult to maintain.

16. Plastics are:

(A) Natural substance.  
(B) Bio degradable.  
(C) Non bio -degradable. 
(D) Reactive.

17. Petroleum is the main source of:

(A) Silk.  
(B) Plastics.  
(C) Cotton.  
(D) All of these.

18. Which of the following is/are common forms of polyester?

(A) PET  
(B) Terylene  
(C) Both (a) and (b)  
(D) None of these

19. Plastic containers are preferred over iron containers for storing food because, plastic is:

(A) Non-reactive.  
(B) Durable.  
(C) Cheap.  
(D) All of these.

20. The plastics that cannot be repeatedly molten and given new shapes are called:

(A) Thermoplastics.  
(B) Thermosetting.  
(C) Elastomers.  
(D) None of these.
21. Which of the following is thermosetting plastic?
(A) PVC.  (B) Melamine.  (C) Polythene.  (D) All of these.

22. Handles of saucepan are made of
(A) Thermoplastics.  (B) Acrylic.  (C) Thermosetting plastic.  (D) None of these.

23. Which of the following fabric will absorb maximum amount of water
(A) Silk  (B) Cotton  (C) Nylon  (D) Rayon

24. Non stick cookware has coating of:
(A) PET.  (B) Teflon.  (C) Acrylic.  (D) Melamine.

25. A fabric which does not wrinkle easily is:
(A) Cotton.  (B) PET.  (C) Polyester.  (D) Rayon.

26. Plastics and synthetic fibers are made of large units called as:
(A) Monomers.  (B) Cations.  (C) Anions.  (D) Polymers.

27. The fiber which is prepared from wood is:
(A) Nylon.  (B) PET.  (C) Acrylic.  (D) Rayon.

28. A plastic which becomes soft on heating and can be repeatedly remolded into desired shape is
(A) Thermoplastic.  (B) Thermosetting.  (C) Monomer.  (D) None of these.

29. PVC (Poly vinyl chloride) and Polythene are:
(A) examples of thermosetting plastics.  (B) examples of thermoplastics.
(C) examples of natural substances.  (D) examples of heavy fibers.

30. Which of the following does not have cross linked arrangement:
(A) Bakelite.  (B) Melamine.  (C) PVC.  (D) None of these.

31. Electrical switches are made of:
32. Uniform of fireman is coated with:
   (A) Teflon.  (B) Rayon.  (C) PVC.  (D) Melamine.

33. Acrylic is used as substitute of wool because:
   (A) It appears like wool.  (B) It is cheap.
   (C) It is more durable than wool.  (D) All the reasons are correct.

34. Soft drink bottles are made of:
   (A) PET.  (B) PVC.  (C) Rayon.  (D) Teflon.

35. PET is:
   (A) polyester.  (B) polyamide.  (C) polyacid.  (D) polyacronitrile.

36. Nylon fibers are:
   (A) strong.  (B) light.  (C) elastic.  (D) having all of these properties.

37. Which of the following statement is true for Rayon
   (A) It is cheaper than wool.  (B) It is obtained by chemical treatment of wood pulp.
   (C) It can be dyed in various colours  (D) All the statements are correct.

38. Cheap sweaters are made of:
   (A) polyester.  (B) acrylic.  (C) polycot.  (D) cotton.

39. On a rainy day one must avoid wearing clothes made of:
   (A) cotton.  (B) nylon.  (C) rayon.  (D) acrylic.

40. Cheap silk sarees are made of:
   (A) acrylic.  (B) rayon.  (C) polyester.  (D) polycot.

41. What are natural fibres?

42. What are man made fibres?
43. Name two natural fibres obtained from plants.
44. Name two natural fibres obtained from animals.
45. What is a polymer?
46. Name a natural polymer.
47. Name a synthetic fibre which resembles silk.
48. How is rayon prepared?
49. Name the first fully synthetic fiber.
50. Name the raw material used in synthesis of nylon.
51. Name the repeating unit of polyester.
52. Name two common forms of polyester.
53. Name the raw materials used for making synthetic fibers.
54. What are thermoplastics?
55. What are thermosetting plastics?
56. Give two examples of thermoplastics.
57. Give two examples of thermosetting plastics.
58. Why Bakelite is used in making electrical switches? <
59. Name the chemicals which give fruits their characteristic smell.
60. Name the different types of plastics.
61. Name the man made fiber made of wood pulp.
62. Name the fabric, which is used to imitate wool.
63. Why nylon is used for making carpet, toothbrush bristles and tyre?
64. Handles of frying pans are made of plastic. Why? <
65. Electrical wires have covering of plastic. Why?
66. How are clothes, fabrics and fibres are related to each other?
68. Why scientists tried to discover a fabric like silk?
69. Why nylon is used in making clothes?

70. Explain why some fibres are called synthetic.

71. Mark the correct answer.

    72. Rayon is different from synthetic fibres because
        (a) it has a silk-like appearance.
        (b) it is obtained from wood pulp.
        its fibres can also be woven like those of natural fibres.

        (a)

73. Fill in the blanks with appropriate words.

        (a) Synthetic fibres are also called ___ or ______ fibres.
        (b) Synthetic fibres are synthesised from raw material called.
        Like synthetic fibres, plastic is also a ___.

<2M>

74. Although rayon is obtained from a natural source, wood pulp, yet it is a man-made fibre. Give reasons.

75. Nylon is used in making many articles. Name four of them.

76. Why polyester is suitable for making dress material?

77. What is PET? What is its use?

78. What are acrylics? What are its uses?

79. Why one should never wear polyester clothes while working in the kitchen or laboratory?

80. Why synthetic fibres are preferred as clothing material?

81. Why melamine is used for making kitchenware and fabrics which resist fire?

82. Why plastic containers are convenient to store different food containers?

83. Acrylic is considered cheap substitute of wool. Give reasons.

84. Define (i) Fabric (ii) Cloth

85. Give examples which indicate that nylon fibres are very strong.

86. Explain why plastic containers are favoured for storing food.

87. Explain the difference between thermoplastic and thermosetting plastics.
4. Explain why the following are made of thermosetting plastics.

5. (a) Saucepan handles
    (b) Electric plugs/switches/plug boards

89. Categorise the materials of the following products into 'can be recycled' and 'cannot be recycled'.
Telephone instruments, plastic toys, cooker handles, carry bags, ball point pens, plastic bowls, plastic covering on electrical wires, plastic chairs, electrical switches.

<3M>

90. Write the properties and uses of rayon.

91. Write three characteristics of synthetic fibers.

92. Write three properties of plastics.

93. Write three disadvantages of synthetic fibers.

94. Rana wants to buy shirts for summer. Should he buy cotton shirts or shirts made from synthetic material? Advise Rana, giving your reason.

95. Give examples to show that plastics are noncorrosive in nature.

96. Should the handle and bristles of a tooth brush be made of the same material? Explain your answer.

97. Avoid plastics as far as possible'. Comment on this advice.

<5M>

98. What are the advantages of using synthetic fiber?

99. State True or False
(i) Nylon is a polymer.
(ii) All polymers are natural materials.
(iii) Polythene is thermosetting plastic.
(iv) Starch, cellulose, proteins, silk and rubber are natural polymers.
(v) Polyethylene terephthalate (PET) is used in making clothes.

100. i) The process of formation of polymers is called ____________________.
    ii) Cotton is a natural polymer made of______.
    iii) Another name of ______is artificial silk.
    iv) ________ has feel of wool.
    V) Bakelite is an examples of____________.
101. Match the column A and B

<table>
<thead>
<tr>
<th>COLUMN A</th>
<th>COLUMN B</th>
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</thead>
<tbody>
<tr>
<td>(i) Teflon</td>
<td>(a) Natural polymer</td>
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<tr>
<td>(ii) Terelene</td>
<td>(b) Artificial silk</td>
</tr>
<tr>
<td>(iii) Cellulose</td>
<td>(c) Acrylic</td>
</tr>
<tr>
<td>(iv) Rayon</td>
<td>(d) Non stick coating</td>
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<tr>
<td>(v) Synthetic fiber</td>
<td>(e) popular polyester</td>
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102. State True or False (5Marks)
(i) Plastic is also a polymer like the synthetic fibre  
(ii) Synthetic fabrics soak less water (sweat)  
(iii) Rayon is modified glucose.  
(iv) Polywool is mixture of polyester and wool.  
(v) All plastics are biodegradable.

103. What are the problems related to use of plastics.