

Answer sample C

Q1: matching between the two lists A&B:

Answer
1-e
2-f
3-a
4-i
5-h
6-g
7-c
8-j
9-b
10-d

Q2: A: numerate one of the following :

1. Enteropathogenic strains of E.coli

1. Enterotoxigenic E.coli (O6:H16; O8:H9; O78:H11 serotypes) cause a severe diarrheal illness brought on by two enterotoxins (HL and HS) that stimulate heightened secretion and fluid loss (enterotoxins, endotoxin)
2. •Enteroinvasive E.coli (O124; O144; O152 serotypes) cause an inflammatory disease similar to *Shigella* dysentery that involves invasion and ulceration of the mucosa of the large intestine (invasion, cytotoxin, endotoxin)
3. •Enteropathogenic E.coli (O26:K6; O55:K5; O111:K4) are linked to a wasting form of infantile diarrhea (endotoxin)
4. •Enterohemorrhagic E.coli (O157:H7; O126:H11) causes a bloody diarrhea and hemorrhagic syndrome that can cause permanent damage to the kidney (endotoxin, cytotoxin)

2. The serogroups of *Shigella* species

Shigella species are classified to four serogroups:

1. Serogroup A: *Shigella dysenteriae* (12 serotypes)
2. Serogroup B: *Shigella flexneri* (6 serotypes)
3. Serogroup C: *Shigella boydii* (23 serotypes)
4. Serogroup D: *Shigella sonnei* (1 serotype)

B: Explain the action of the following (only 3)

1. IgA (N. meningitidis): Destroys IgA immunoglobuline, therapy helps gonococci to attach to the epithelial cells of the upper respiratory tract.
2. Elek test: test to determine the toxigenicity of C. diphtheria
3. Type III secretion systems of Salmonella: Type III secretion systems (TTSS) consist of nearly 20 proteins, which facilitate secretion of virulence factors of Salmonella into host cells
4. LOS endotoxin (N. meningitidis): cause damage of the vessels associated with meningococcal infections

Q3: choose the correct answer :

1. C
2. A
3. B
4. B
5. B
6. C
7. C
8. A
9. A
10. B

Q4: Answer by true or false the following sentences (only five)

1. T
2. T
3. .T
4. .F
- 5.** .F
- 6.** .T

Best Wishes

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