

Date : 24.08.2018

## INSTRUCTION

- Answer all questions
- Hand writing should be legible
- Do not write on the back side of the front page of answer sheet
- Answers should be properly numbered
- Do not miss to write your entry number

1x5=5

Q1.

(i) In a cotton comber, noil extraction increases

- A. With a decrease in detachment setting ✗  
 B. With an Increase in pre-combing draft ✗

- C. If majority of hooks are presented in leading direction ✓  
 D. With an increase in short fibres ✓

(ii) Nipper assembly movement is

- A. Fast in forward journey  
 B. Slow in forward journey ✓  
 C. Fast in backward journey ✓  
 D. Slow in backward journey

(iii)

The draft used for preparing comber lap affects

- A. Lap uniformity  
 B. Lap strength  
 C. Short fibres in lap ✗  
 D. Removal of impurities

(iv) If E is detachment setting and S is lap feed length per nip, then the shortest fibre that finds its way in sliver for backward and forward feed machines are:

- A.  $E+S$ ,  $E$  ✗  $E$   $E-S$   
 B.  $E-S$ ,  $E$  ✓  
 C.  $S$ ,  $E-S$  ✗  
 D.  $S$ ,  $E+S$  ✗

(V) Asymmetric web collection improves sliver regularity because

- A. Web accumulates on web tray  
 B. Piecing length gets distributed over longer sliver length  
 C. Draft in web tray is low  
 D. Doubling takes place between detached combed fringes ✓

Q.2

A 8 head comber is running at 400 nips/min. The lap fed is 60 kilotex and noil extracted is 20%. If the feed/nip is 7 mm, then with machine utilization of 80%, what will be the production rate in kg/h?

(6)

11.6096

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Q3. The cylinder combing timing is shown in the diagram (index no. 35 to 5). Draw the diagram for

- (i) Nipper oscillating movement,
- (ii) Nipper opening and closing *last 35*
- (iii) Feed roller movement (forward & backward feed) *forward after close*

(3 x 3 = 9)

*combs*

