

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. $E+S, E$ ✗
- 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?

1.6096

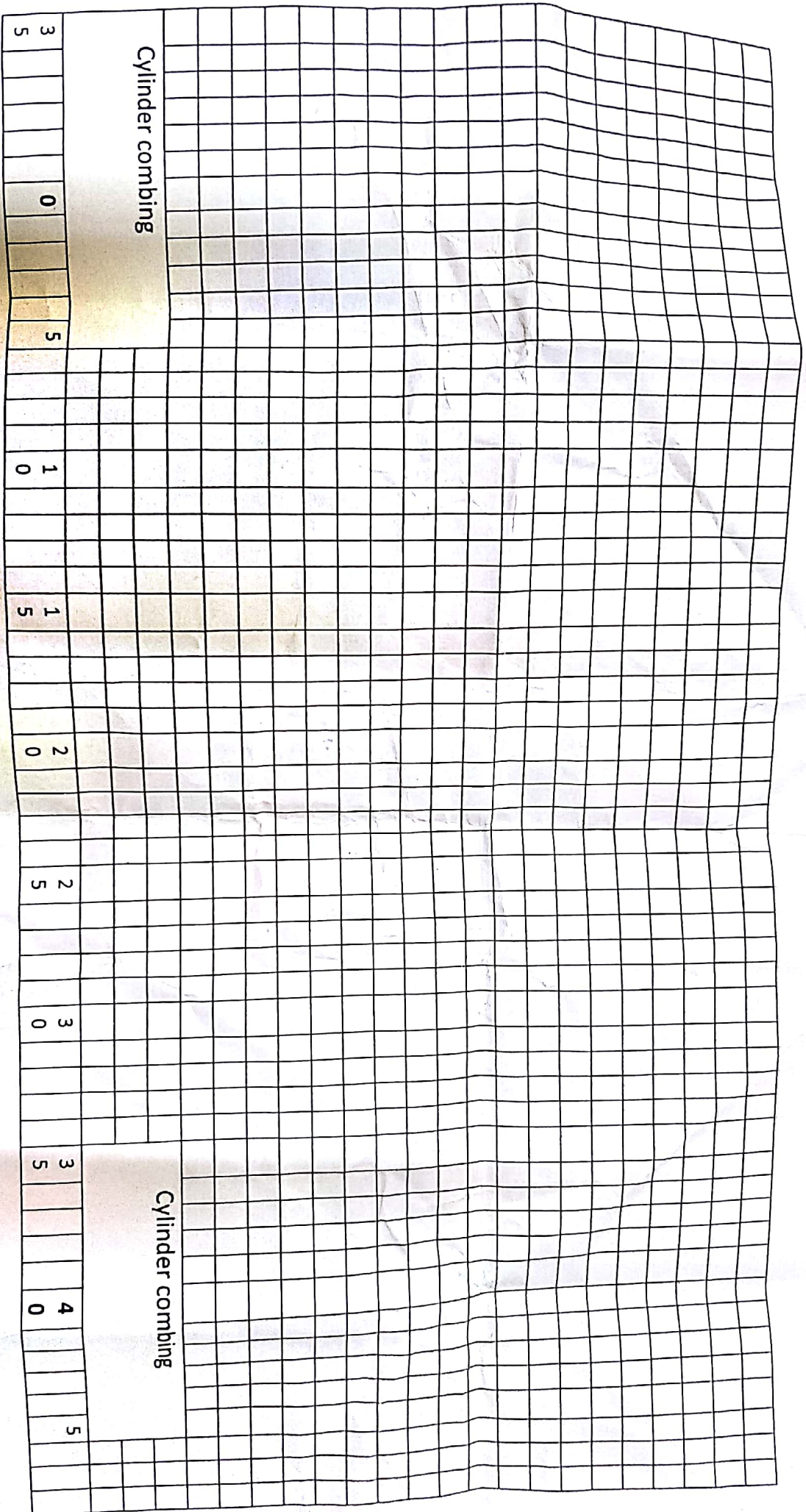
(6)

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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 *5 to 35* *forward & backward*
- (iii) Feed roller movement (forward & backward feed)

(3 x 3 = 9)



combs