

TXL221: Yarn Manufacture I

Minor Test II

Full Marks: 30

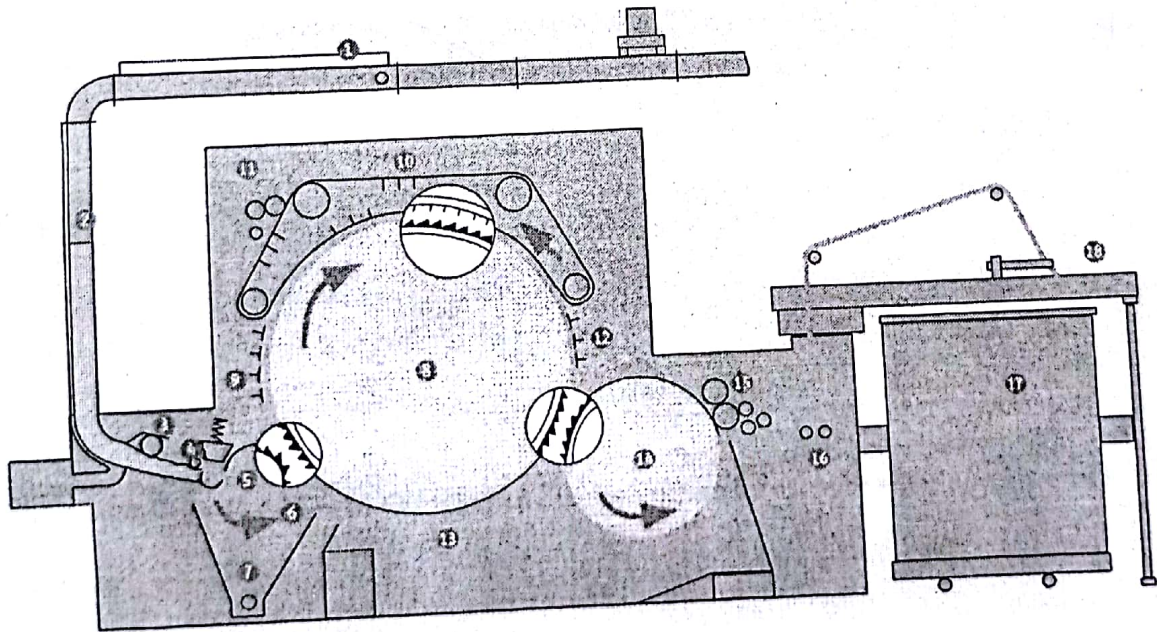
Date: March 26, 2018, Monday

Time: 4 pm - 5 pm, Venue: LH325

Section A (Time: 4:00 pm to 4:15 pm)

Name: Aashi Agarwal Entry No.: 2016TT10860 Group: 3.

Q1. A modern high performance carding machine is shown below. Write the names of the parts in the boxes provided below. 0.5x10



4: <del>Feed Roller</del>	5: <del>Take-in</del>	8: <del>Cylinder</del>	9: <del>Grid bars</del>	10: Flat ✓
14: <del>Doffer</del>	15: <del>Guide rollers</del>	16: <del>Take calendar roller</del>	17: <del>Storage Can</del>	18: <del>coiler calendar roller</del>

Q2. The following ten questions are of multiple-choice type. For each question, you will get one mark if you tick (✓) only the correct answer and zero mark if you do not tick any option. In all other cases, 1/4 marks will be deducted for each question.

(a) In carding, unidirectional feed results in

- (i) more fiber opening (ii) less fiber damage (iii) higher removal of impurities (iv) higher production

(b) Heel and toe arrangement is seen in-between

- (i) feed plate & taker-in (ii) taker-in & cylinder (iii) cylinder & flat (iv) cylinder & doffer

(c) In case of synthetics, the negative inclination of taker-in wire points results in

- (i) better carding (ii) better cleaning (iii) higher nep removal (iv) easy fiber transfer

(d) In carding, the highest draft is kept in-between

- (i) feed roller & taker-in (ii) taker-in & cylinder (iii) cylinder & flat (iv) cylinder & doffer

(e) The fiber parameter that does not affect the machine setting in carding is

- (i) fiber type (ii) fiber length (iii) fiber fineness (iv) fiber elongation

(f) Flexible card clothing is seen on

- (i) taker-in (ii) cylinder (iii) flat (iv) doffer

(g) The wire point density (PPSI) of

- P. Taker-in Q. Cylinder R. Flat S. Doffer

follows the order

- (i)  $P < S < R < Q$  (ii)  $P < R < S < Q$  (iii)  $P < S < Q < R$  (iv)  $P < Q < S < R$

(h) In card sliver, the most frequent fiber configuration is

- (i) leading hooks (ii) trailing hooks (iii) hooks at both ends (iv) no hook

(i) Number of neps in a card sliver increases with higher fiber

- (i) length (ii) diameter (iii) linear density (iv) initial modulus

(j) The weight of 50 m length of a card sliver with 3 ktex fineness is

- (i) 150 kg (ii) 15 kg (iii) 1.5 kg (iv) 0.15 kg

$$1000 \text{ m} \rightarrow 3 \text{ kg.}$$

$$1 \text{ m} \rightarrow \frac{3}{1000} \text{ kg.}$$

$$\text{So } \frac{3}{1000} \times 50$$