THE TEXTILE ASSOCIATION (INDIA)
A.T.A. PART – III NEW 3 YEARS EXAMINATION
PAPER – AO3.2
KNITTING TECHNOLOGY

Date: 25.12.2017  Marks: 100  Time: 10.00am to 1.00pm

Instructions:
1. Attempt six questions out of which Q.1 is compulsory
2. Answer each main question on new page
3. Figures to the right indicates full marks
4. Illustrate your answers with sketches and flow-charts wherever necessary.
5. Use of non-programmable electronic calculator permissible
6. Mobile and any other communication devices are not allowed in exam hall
7. Assume suitable data wherever necessary.

Q. 1.
a. Match the Following:

<table>
<thead>
<tr>
<th>1 Course</th>
<th>A Vertical Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Wale</td>
<td>B Holding Down Stitch</td>
</tr>
<tr>
<td>3 Cylinder</td>
<td>C Forming Stitch</td>
</tr>
<tr>
<td>4 Sinker</td>
<td>D Tracks</td>
</tr>
<tr>
<td>5 Cam</td>
<td>E Needle Bed</td>
</tr>
<tr>
<td>6 ----------</td>
<td>F Horizontal Column</td>
</tr>
</tbody>
</table>

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b. Fill in the Blanks

a. _________ is total number of needle loops in a square area measurement.
b. Latch needles are also termed as __________ needle.
c. Run-in per rack in warp knitting is equivalent to __________ in weft knitting.
d. The rack is an internationally recognized unit of __________ knitting cycles.
e. Warp knitting designing capacity depends on __________

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c. Write True or false

a. Fishing net are produced on flat knitting machine.
b. Laying–in is achieved in warp knitting by causing a guide bar to only overlap.
c. Needle arrangement for rib structure and interlock structure is same.

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d. A held loop is an old loop which the needle has retained and not released and knocked – over at the next yarn feed.

e. Cut edge fabric is usually produced by slitting open a tube of fabric produced on a circular knitting machine.

d. Write the answers of following in short.
   a. Draw thread diagram of open loop
   b. Define stitch and stitch density
   c. What is technical face and technical back?
   d. What is presser bar?
   e. Draw lapping movement for 1-2/1-0//

Q. No. 2
   a. State importance of guide bars in warp knitting machine.
   b. Describe knitting cycle of beard needle on Tricot Knitting machine with neat sketch.

Q. NO. 3.
   a. Differentiate between warp knitting and weft knitting.
   b. Differentiate between woven and knitted fabric.

Q. No. 4
   a. Explain knitting cam with the help of neat sketch.
   b. Differentiate between latch needle and beard needle.

Q. No. 5
   a. Explain passage of yarn through flat knitting machine.
   b. Explain purl structure with the help of neat sketch.

Q. No. 6.
   a. Describe yarn preparatory processes for warp knitting.
   b. Explain knitting cycle of Bearded needle tricot machine with the help of neat sketch.

Q. No. 7.
   a. Draw neat diagram of a socks and explain different parts with their design aspect.
   b. Write a note on ‘Development of knitted designs on computer and its application on machine’.

Q. No. 8.
   b. What are different fabric defects in weft knitting? Explain its causes.

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