



SE-7507

**B. E. - IV (Sem - VII) (Textile Technology)
Examination**

May / June - 2011

Non woven, Geotextile & Carpet Weaving

Time : 3 Hours]

[Total Marks : 100

Instructions :

(1)

नीचे दशावेक निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. E. - IV (Sem - VII) (TT)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Non woven, Geotextile & Carpet Weaving"/>	<input type="text"/>
Subject Code No. : <input type="text" value="7"/> <input type="text" value="5"/> <input type="text" value="0"/> <input type="text" value="7"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="1"/> <input type="text" value="2"/>	<input type="text"/>
	Student's Signature

- (2) Figure to the **right** indicate **full** marks.
(3) Answers to the **two** sections must be written in **separate** answer books.
(4) Tie two sections separately.

SECTION - I

- 1 (a) Fill up the blanks : 5
- (i) Most of the carpet yarn produced in country are sent to _____ for dyeing.
- (ii) A rug consists of _____ to over _____ knots per sq inch.
- (iii) The density of EPS grade HD is _____ kg/m³.
- (iv) The cumulative Indian consumption of geosynthetics made in India is only around _____ million sq.mt.
- (b) Discuss briefly the principal degrading agencies and their effects on geotextiles. 5
- (c) Discuss in brief the fundamental properties of textiles that makes them suitable for civil engineering applications. 5
- (d) Discuss in brief about Plush or Velvet carpets. 5

- 2 (a) Define the terms : (i) geogrids, (ii) geonets. 5
(b) Describe the construction basics of Tufted carpets. 10

OR

- 2 (a) Define : (i) woven carpet, (ii) axminster carpet. 5
(b) Discuss in detail the geotechnical functions of geotextiles. 10
- 3 Write short notes on : (any three) 15
(a) Flocked carpets
(b) Role of woollen carpets
(c) Needle punched carpets
(d) Constraints in Indian carpet export.

SECTION - II

- 4 (a) Give line diagram only of the following : 10
(i) Kiss Coater.
(ii) Thermal Bonding.
(iii) Segment structure.
(iv) Single sided needling.
(v) Knife Coating.
(b) Explain the manufacturing of cross laid web with the help of neat sketch. 10
- 5 (a) With the help of neat sketches describe Maliwatt Stitch Bonding. 6
(b) With the help of neat sketch, explain in detail the working of needle loom for manufacturing nonwovens. 9

OR

- 5 (a) With the help of neat sketches explain how chemical bonding of web is done. 9
(b) With the help of neat sketches describe Arachne Stitch Bonding. 6

6 Write short notes on : (any **three**)

15

- (i) Moulded nonwovens.
 - (ii) Water supply system used in wet laid manufacturing industry.
 - (iii) Enduse application of nonwovens.
 - (iv) Sturcture of nonwovens.
-