# LESSON 7 – LISTENING SECTION 3

***Questions 21-25***

*Choose the correct letter, **A**, **B** or **C**.*

## Project on using natural dyes to colour fabrics

**21** What first inspired Jim to choose this project

**A** textiles displayed in an exhibition

**B** a book about a botanic garden

**C** carpets he saw on holiday

**22** Jim eventually decided to do a practical investigation which involved

**A** using a range of dyes with different fibres.

**B** applying different dyes to one type of fibre.

**C** testing one dye and a range of fibres.

**23** When doing his experiments, Jim was surprised by

**A** how much natural material was needed to make the dye.

**B** the fact that dyes were widely available on the internet.

**C** the time that he had to leave the fabric in the dye.

**24** What problem did Jim have with using tartrazine as a fabric dye

**A** It caused a slight allergic reaction.

**B** It was not a permanent dye on cotton.

**C** It was ineffective when used on nylon.

LIVEWORKSHEETS

***Questions 25-30***

What problem is identified with each of the following natural dyes?

*Choose **SIX** answers from the box and write the correct letter, **A-H**, next to Questions 25-30.*

| Problems | |
|---|---|
| A | It is expensive. |
| B | The colour is too strong. |
| C | The colour is not long-lasting. |
| D | It is very poisonous. |
| E | It can damage the fabric. |
| F | The colour may be unexpected. |
| G | It is unsuitable for some fabrics. |
| H | It is not generally available. |

| | **Natural dyes** | |
|---|---|---|
| **25** | turmeric | ..... |
| **26** | beetroot | ..... |
| **27** | Tyrian purple | ..... |
| **28** | logwood | ..... |
| **29** | cochineal | ..... |
| **30** | metal oxide | ..... |

LIVEWORKSHEETS

# LESSON 7 – LISTENING SECTION 3

## TAPESCRIPT

**TUTOR** OK, Jim. You wanted to see me about your _____ project.

**Jim** That's right. I've been looking at how a range of natural dyes can be used to color fabrics like cotton and wool.

**TUTOR** Why did you choose that topic?

**Jim** Well, I got a lot of useful ideas from the museum, you know, at the exhibition of textiles. But I've always been interested in anything to do with color. Years ago, I went to a carpet shop with my parents when we were on holiday in Turkey, and I remember all the amazing colors.

**TUTOR** They might not all have been natural dyes.

**Jim** Maybe not, but for the project I decided to follow it up. And I found a great book about botanic garden in California that _____ plants used for dyes.

**TUTOR** OK. So, in your project, you had to include a practical investigation.

**Jim** Yeah. At first I couldn't _____ my variables. I was going to just look at one type of fibre for example, like cotton …

**TUTOR** … and see how different types of dyes affected it?

**Jim** Yes. Then I decided to include others as well, so I looked at cotton and wool and nylon.

**TUTOR** With just one type of dye?

**Jim** Various types, including some that weren't natural, for comparison.

**TUTOR** OK.

**Jim** So, I did the experiments last week. I used some _____, I found a website which supplied them, they _____ just a few days, but I also made some of my own.

**TUTOR** That must have taken quite a bit of time.

**Jim** Yes, I'd thought it'd just be _____ a teaspoon or so of dye, and actually _____ at all. Like I was using one vegetable, beetroot, for a red dye, and I had to chop up a whole pile of it. So it all took longer than I'd expected.

**TUTOR** One possibility is to use food colorings.

**Jim** I did use one. That was a yellow dye, an artificial one.

**TUTOR** Tartrazine?

**Jim** Yeah. I used it on cotton first. It came out a great color, but when I rinsed the material, the color just washed away. I'd been going to try it out on nylon, but I abandoned that idea.

LIVEWORKSHEETS

**TUTOR** Were you worried about health issues?

**Jim** I'd thought if it's a legal food coloring, it must be safe.

**TUTOR** Well, it can occasionally cause _____, I believe.

**TUTOR** So what natural dyes did you look at?

**Jim** Well, one was turmeric. The color's great, it's a really strong yellow. It's generally used in dishes like curry.

**TUTOR** _____ quite good for your health when eaten, but you might find it's not permanent when it's used as a dye – a few washes, and it's gone.

**Jim** Right. I used beetroot as a dye for wool. When I chop up beetroot to eat I always end up with bright red hands, but the wool ended up just a sort of _____ shade. Disappointing.

**TUTOR** There's a natural dye called Tyrian purple. Have you heard of that?

**Jim** Yes. It comes from a shellfish, and it was worn in ancient times but only by important people as it was so rare. I didn't use it.

**TUTOR** It _____ centuries ago, though one researcher managed to _____ some recently. But that shade of purple can be produced by chemical dyes nowadays. Did you use any black dyes?

**Jim** Logwood. That was quite complicated. I had to prepare the fabric so the dye would take.

**TUTOR** I hope you were careful so wear gloves.

**Jim** Yes. I know _____that dye.

**TUTOR** Good. It can be extremely dangerous if it's ingested. Now, presumably you had a look at an insect-based dye? Like cochineal, for example?

**Jim** Yes, I didn't actually make that, I didn't have time to start crushing up insects to get the red color and anyway they're not available here, but I managed to get the dye quite easily from a website. But it _____. I can see why it's generally just used in cooking and in small quantities.

**TUTOR** Yes, it's very effective, but that's precisely why it's not used as a dye.

**Jim** I also read about using metal oxide. Apparently you can allow iron to rust while it's _____ the fabric, and that colors it.

**TUTOR** Yes, that works well for dying cotton. But you have to be careful as the metal can actually affect the fabric and so you can't expect to _____ out of fabrics treated in this way. And the colors are quite subtle, not everyone likes them. Anyway, it looks as if you've done a lot of work.

LIVEWORKSHEETS

# VOCABULARY

***Translate these following expressions into Vietnamese:***

1 Textile design (n)
2 Specialize in (v)
3 Decide on (v)
4 Ready-made natural dyes
5 Come in (v)
6 A matter of
7 That is (not) the case
8 Allergic reaction(s) (n)
9 It's meant to V/be
10 Watery cream (n)
11 Fall out of use (v)
12 Get hold of (v)
13 The danger with
14 Cost a fortune
15 Be in contact with
16 Get a lot of wear

LIVEWORKSHEETS