

PAPER 11 TEST
TROUBLE SHOOTING

Your Name _____
Don't write in boxes

CLOUDY WATER

Possible causes: 1. _____

Remedy: 2. _____

COLOURED WATER (two points)

3. Colouration may be caused by (a) _____

(b) _____

4 Metal ions.

Most coloured metal ions are insoluble in alkaline and well-chlorinated water and they impart a green, milky appearance to the water.

The water should be

5. _____ immediately as the green haze will

6. _____ the interior of the pool

7. _____ of the contaminates will accelerate the removal.

8. The contamination by metal ions can be prevented by: (four points)

a. _____

b. _____

c. Do not use _____

d. Prevent _____ dropping into the pool.

9. Tannins (Two points)

This type of colouration is found in water which is drawn from (a) _____

Also it may be leached out from the timber of new hot tubs.

Remedy: Tannins are destroyed by: _____

10. Algae

Algae are easily destroyed by which common pool chemical?

STAINING OF THE WALLS AND FLOOR

Possible cause: Metal ions like iron, copper, manganese, silver etc. tannins and pigments from plants, or using a foul or unclean water source such as a dam, river, well etc.

11. Prevention: the pH of the pool water (which should always be greater than 7.0)

- (a) Could _____ the make-up water instead of adding it directly into the pool.
- (b) Could _____ leaves, twigs, mud & detritus as soon as possible.

12. How to remove metal ion stains.

In pools with non-reactive finish. (Eight points)

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____
- g. _____
- h. _____

13. In pools with reactive finish: (Two points)

1. _____

The treatment carried out (above) is not satisfactory in these pools

- (a) If the stain is in small spots they may be removed by _____
- (b) To remove larger stains the water has to be _____ and the stain removed by _____

Some methods leave a very rough finish and should be used as a last resort

If acid washing is used care should be taken to remove the excess liquid as soon as possible to prevent the staining of the floor or the lower parts of the wall.

14. Removal of organic stains. (Three points)

(a) _____ destroys the organic stains.

If necessary (b) _____ may be applied

or even dropping small amounts of (c) _____ on the stain.

Care should be taken not to bleach the interior, especially the coloured or printed vinyl lining. If in doubt about fading do NOT add solid chlorine to the pool.

15. BLACK SPOT ALGAE

Small black spots can be removed relatively easily by _____.

16. Black spot algae found in concrete pools with marblesheen or other cement-type finishes may be removed by ...

- (a) _____
- (b) _____
- (c) _____
- (d) _____
- (e) _____

(Five points)

17 EYE IRRITATION, STRONG CHLORINE ODOUR (Three points)

These are the result of insufficient chlorination and the presence of chloramines.

Remedy:

- a. _____
- b. _____
- c. _____

18 RAPID CONSUMPTION OF CHLORINE (Three points)

Chlorine (and bromine) is rapidly destroyed by ultraviolet rays of the sun, by heat and organic contaminates. The loss can be minimized although it cannot be avoided altogether.

Remedy:

- a. _____
- b. _____
- c. _____

19 GREEN ALGAE ON THE WALLS (Three points)

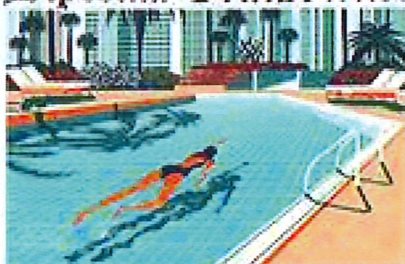
It is due to insufficient chlorination and the lack of algaecides.

Remedy:

- (a) _____
- (b) _____
- (c) _____

-end-

Diploma Course 2021



**SWIMMING POOL CONSTRUCTION
TECHNOLOGY & MAINTENANCE**

Dip Pool Tech (NZPIA)