

NZ POOL INDUSTRY ASSOCIATION INCORPORATED
DIPLOMA COURSE 2022 TEST PAPER

New Zealand Master Pool Builders Inc. PO Box 17069 Greenlane 1546

Dip.Pool Tech

– email diploma@poolguild.org.nz

PAPER 4 TEST
SWIMMING POOL EQUIPMENT

Your Name _____
Don't write in the score boxes

1. WHY ARE FILTERS REQUIRED?

2. HOW DO FILTERS WORK?

3. WHAT ARE THE THREE BASIC TYPES OF FILTERS?

4. DESCRIBE EACH TYPE OF FILTER IN LESS THAN 50 WORDS

1. _____

2. _____

3. _____

5. DESCRIBE FILTRATION EFFICIENCY LEVELS FOR THE MAIN TYPES

6. WHAT SIZE (IN MICRONS) ARE THESE TYPICAL CONTAMINANTS?

Bacteria _____ Microns

Algae Cells _____ Microns

Algae Spores _____ Microns

Virus Cells _____ Microns

7. WHAT SIZE (IN MICRONS) ARE THE FOLLOWING FILTER MEDIA?

Filter Sand _____ Microns

DE Power _____ Microns

Cartridge _____ Microns

8. WHAT PERCENTAGE OF A METRE IS A MICRON?

____ %

9. WHAT IS A FLOCCULANT?

10. WHEN IS A FLOCCULENT TREATMENT REQUIRED?

11. WHAT PROCESS IS FOLLOWED TO CORRECTLY USE FLOCCULANT IN A POOL?

12. WHAT IS THE DESIRED RESULT FROM USING FLOCCULANT?

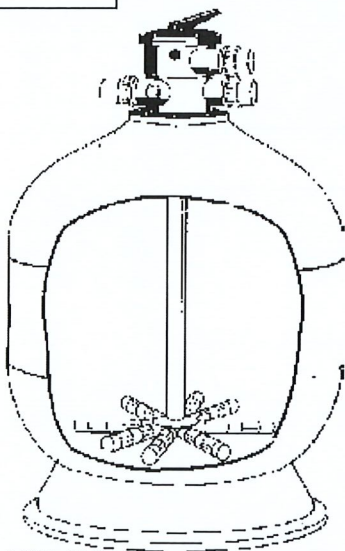
13. HOW DO YOU RESTORE PROPER FILTER FUNCTION TO A BLOCKED SAND FILTER?

14. WHAT OPTIONS ARE THERE TO REDUCE WASTE WATER USAGE

15. WHAT IS THE RECOMMENDED RATIO (HEIGHT TO WIDTH) FOR A SAND FILTER

1.0H X 1.0W 1.5H X 1.0W 1.0H X 2.0W 1.5H X 2.0W (CIRCLE ONE)

16. DESCRIBE THE FOUR MAIN FEATURES IN THIS VIEW OF A TYPICAL SAND FILTER



1. _____
2. _____
3. _____
4. _____

17. WHY DOES THE pH LEVEL AFFECT THE OPERATION OF A FILTER?

18. WHAT ARE CARTRIDGE FILTERS?

19. SHOULD A CARTRIDGE FILTER BE BACKWASHED?

_____ YES _____ NO WHY _____

20. WHAT IS THE MAXIMUM VOLUME OF WATER FOR A FIVE Sq M CARTRIDGE?

21. HOW DOES A CARTRIDGE "VACUUM FILTER SYSTEM" WORK?

22. WHAT IS A DIATOMACEOUS EARTH (DE) FILTER?

23. CAN DE BE USED IN A SAND FILTER, AND IF SO WHAT FOR?

24. WHAT IS THE RECOMMENDED FILTRATION CYCLE FOR SAND FILTERS?

25. HOW DO YOU CALCULATE THE MINIMUM FILTRATION CYCLE FOR YOUR POOL

Step 1 _____

Step 2 _____

Step 3 _____

26. THE INSTALLATION OF THE FILTER

WHAT ARE THE RECOMMENDED STEPS WHEN INSTALLING A FILTER?

(1) _____

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

(11) _____

(12) _____

(13) _____

(14) _____

(15) _____

(16) _____

27. DESCRIBE THE INSTALLATION & PURPOSE OF A BACKWASH LINE

28. WHAT IF THERE IS NO COUNCIL SEPTIC SEWER CONNECTION?

29. ARE THERE RULES ON DISCHARGING BACKWASH WATER ONTO THE GROUND?

30. WHAT FILTER MAINTENANCE IS REQUIRED?

(1) Manufacturer's Instructions

(2) Backwash Valve (MPV)

(3) Air Leaks

(4) Pump and Motor Bearings

31. HOW MANY TYPES OF AUTOMATIC CHLORINATORS ARE THERE?

32. DESCRIBE BRIEFLY THE FOLLOWING:

FLOATING DISPENSERS

METERING DEVICES

ELECTROLYTIC CHLORINATORS

IONIC STERILIZERS

33. WHAT IS THE SECOND CHEMICAL PRODUCED BY SALINE ELECTROLYSIS?

SODIUM CHLORIDE AND _____

34. HOW DOES THIS CHEMICAL AFFECT THE POOL WATER?

35. WHAT IS "VOLTAGE LEAK"?

36. DESCRIBE AUTOMATIC pH CONTROLLERS

-end-

