

EXAM VERSION B

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For the following questions, please choose the answer that best completes the sentence or answers the question.

1. Which of the following describes sedimentation?

- a) Lowering of the water surface or water table
- b) The gradual downward flow of water from the surface through soil to groundwater and water table reservoirs
- c) The settling out of soil particles transported by water and wind
- d) Participating in a sandcastle competition

2. The main two types of soil erosion discussed in this training are:

- a) Hot and cold
- b) Wind and water
- c) Spring and Summer
- d) Biological and chemical

3. What are the four factors that influence the erosion potential of an area?

- a) Land use, density, traffic, and population
- b) Atmospheric conditions, weather, rainfall, and climate
- c) Permitting, farms, traffic, and weather
- d) Soil characteristics, vegetative cover, topography, and climate

4. Best Management Practices (BMPs) for erosion and sedimentation control include which of the following?

- a) Silt fence and soil stabilization
- b) Caution tape and orange cones
- c) Permits and a hard hat
- d) Wind and water

5. Projects with which of the following issues could experience an enforcement action and possibly monetary penalties from regulatory agencies:

- a) Turbidity from your site contaminating nearby waterbodies
- b) Improperly installed silt fencing or improperly maintained silt fencing
- c) Sediment tracking to roadways from construction sites
- d) Operating without permits (dewatering, construction, etc.)
- e) Any of the above

6. When is Construction Generic Permit (CGP) coverage required?

- a) Only when your site will be active for more than 1 week
- b) When you will be using heavy equipment
- c) When your site disturbs over 1 acre or is less than 1 acre and part of a larger project
- d) Only when your site is next to a lake.

7. Identify correctly installed and maintained perimeter controls in the below photos:

a)



b)



8. Identify the properly selected, installed, and maintained inlet protection in the below photos:

a)



b)



9. Erosion is _____.

- a) The protection, improvement, and use of natural resources according to principles that will assure their highest economic or social benefits.
- b) The process by which the land surface is worn away by the action of wind, water, and gravity.
- c) The process of restoring site conditions as they were before the land disturbance.
- d) The bringing of a surface or a stream bed to grade by running water.

10. What areas should be evaluated during your weekly/rain event inspections?

- a) All stormwater discharges to check for water quality violations
- b) BMPs identified in the SWPPP
- c) All discharge points to check for signs of erosion and sedimentation
- d) Areas used for storage of materials exposed to rainfall
- e) All of the above

11. Within ____ calendar days after your site has achieved final stabilization and all discharges are eliminated, you must submit your Notice of Termination (NOT) form according to the Construction Generic Permit (CGP).

- a) 30 days
- b) 60 days
- c) 14 days
- d) 1 year

12. BMP maintenance activities can be classified into categories including _____.

- a) Aesthetic
- b) Functional
- c) Corrective
- d) All the above

13. How long does the operator have to update or revise the stormwater pollution prevention plan (SWPPP) when site conditions have changed?

- a) 1 day
- b) 7 days
- c) 30 days
- d) The SWPPP cannot be modified

14. An example of a physical effect of erosion and sedimentation is:

- a) Headache
- b) Increased flooding
- c) Disruption of the food chain

15. Along with clearing, grading and excavating, the FDEP has determined that _____ also meet the definition of construction activity.

- a) mobile vehicle washing activities
- b) demolition activities
- c) concrete batch plant operation
- d) water line flushing using potable water

16. What are the concerns when dewatering discharges go offsite?

- a) Water snakes, flooding, and complaints from neighbors
- b) Turbidity, erosion, flooding, release of contaminated groundwater and other surface water quality violations
- c) Sea level rise, contamination, permitting fees
- d) Climate change, mosquitoes, algae

17. What is a major impact of sedimentation?

- a) Clogged and damaged fish gills
- b) Reduced light penetration affecting plants and animal life forms
- c) Decreased recreational use
- d) All of the above

18. A temporary sediment trap must have an initial storage volume of _____ cubic yards or _____ cubic feet per acre of drainage area, measured from the low point of the ground to the crest of the gravel outlet?

- a) 100/1000
- b) 500/13000
- c) 134/3600
- d) 1000/6300

19. Sand, a Type A hydrologic group has _____ infiltration rates and _____ runoff potential even when thoroughly wetted.
- a) Low/ High
 - b) High/ Wide
 - c) High/ Low
 - d) Low/ Slow
20. A floating turbidity barrier/curtain is designed to _____ sediment laden water and allow enough _____ for sediments to settle out of suspension.
- a) Filter/ Distance
 - b) Contain/ Time
 - c) Filter/ Area
 - d) Contain/ Space
21. For proper installation of a silt fence, a trench _____ inches deep and _____ inches wide must be excavated. This will allow the _____ inches of fabric to be buried.
- a) 2"D x 2"W; 4"
 - b) 6"D x 4"W; 8"
 - c) 4"D x 6"W; 8"
 - d) 4"D x 4"W; 8"
22. The maximum spacing between check dams should be such that the _____ of the upstream dam is at same elevation as the _____ of the downstream dam.
- a) Bottom/ Top
 - b) Center/ Edge
 - c) Top/ Bottom
 - d) Edge / Flow line
23. When sodding a slope, start at the _____ and work toward the _____.
- a) Beginning / end
 - b) Center / edges
 - c) Top / bottom
 - d) Bottom / top
24. What is the purpose of having baffles in a sediment basin?
- a) Increase flow length
 - b) Decrease flow length
 - c) Create turbulence
 - d) Looks good
25. The type(s) of dewatering in Florida that generally produces clear, non-turbid groundwater is/are:
- a) Horizontal sock pumping
 - b) Rim ditch with open intake
 - c) Well-point pumping
 - d) Both a and c

26. A stormwater conveyance channel is a constructed waterway. What kind of lining should it have?

- a) Silver
- b) Riprap
- c) Erosion resistant
- d) Sod

27. In a SWPPP the who makes up the Stormwater Team?

- a) Dozier operator
- b) Qualified inspector
- c) Cement Foreman
- d) Sod Farmer

28. Which of the following is considered a surface water quality violation?

- a) More than 5 alligators present in a waterbody
- b) Turbidity level is greater than 29 NTU above natural background conditions.
- c) Water skiers creating a huge wake on a heavily populated lake
- d) Tannic water in a natural stream

29. A detention basin is designed to store stormwater on site and then _____.

- a) Allow time for percolation
- b) Release at a controlled rate
- c) Allow time for evaporation
- d) Filter the water

30. The four principle factors influencing soil erosion are:

- a) Permits, Equipment, Schedule, & People
- b) Vegetation, Soils, Topography, & Climate
- c) Weather, Soils, BMP's, & Maintenance
- d) Time, BMP's, People, & Soils

31. Keep runoff velocities _____ and _____ runoff on the site.

- a) High/ Keep
- b) Low/ Retain
- c) High/ Contain
- d) Slow / Don't keep

32. An important principle of erosion and sediment control is to implement a thorough _____ and _____ program.

- a) Clearing & Grading
- b) Seeding & Mulching
- c) Breakfast & Lunch
- d) Maintenance & Follow-up

33. Apply _____ practices to prevent excessive on-site damage.

- a) Sediment Control
- b) Fair Labor
- c) Environmentally Friendly
- d) Erosion Control

34. During Phase I of site development even the smallest sites will require the installation of _____ practices prior to site clearing and grading.

- a) Security
- b) Sanitation control
- c) Perimeter control
- d) Crowd control

35. Proper fertilizer and pesticide application control under the GI-BMP Program is what kind of BMP?

- a) Nonstructural BMP
- b) Erosion BMP
- c) Structural BMP
- d) Sediment Control BMP

36. In flowing water, turbidity curtains should be placed _____ to the direction of flow in the receiving water body.

- a) Perpendicular (across)
- b) Parallel (along)
- c) Diagonal
- d) Not at all

37. For a type III turbidity barrier installation, where are the anchor lines attached?

- a) Barrier
- b) Buoy
- c) Chain
- d) Nearest tree

38. What do we want to avoid when constructing a retention basin with heavy equipment, especially in the basin floor?

- a) Shopping carts
- b) Excessive scarification
- c) Tourists
- d) Excessive compaction

39. During construction, how often should inlets, outlets, and other control structures be inspected?

- a) Weekly (every 7 calendar days)
- b) After every 1/2" or greater storm event
- c) Both a. & b.
- d) Daily

40. What should you look for when inspecting storm drain inlets after major storms?

- a) Clogging, bypassing, & piping
- b) Aquatic plants
- c) Loose change
- d) Discoloration

41. What should you look for when inspecting outlets (i.e., mitered end) after major storms?

- a) Clogging, bypassing, & piping
- b) Erosion and/or sediment
- c) Loose change
- d) Discoloration

42. The maximum spacing between check dams should be such that the _____ of the upstream dam is at same elevation as the _____ of the downstream dam.

- a) Bottom/ Top
- b) Center/ Edge
- c) Top/ Bottom
- d) Edge / Flow line

43. A stand of vegetation is considered fully established after how long?

- a) 1 week
- b) 1 month
- c) 1 year
- d) 2 years

44. An outlet protection device is designed to prevent scour at outlets and minimize erosion downstream by reducing the _____ of concentrated stormwater flows.

- a) Volume
- b) Sediment load
- c) Frequency
- d) Velocity

45. When placing riprap great care must be taken to avoid damaging the _____ while placing the stone.

- a) Geotextile
- b) Toes
- c) Stones
- d) Equipment

46. What could happen to blown straw mulch which is not anchored, crimped, or tacked?

- a) It could be blown or washed away
- b) It can be stolen
- c) It can tear fabric
- d) It won't take root

47. Before applying topsoil, what should be done to the subsoil to insure proper bonding with the topsoil?

- a) Apply tackifier
- b) Apply lime & fertilizer
- c) Discing & Scarifying
- d) Apply mulch

48. When sodding a slope, in which direction should the strips be laid?

- a) Up and down the slope
- b) Perpendicular to the slope
- c) 45 degrees clockwise
- d) North

49. The process by which the land surface is worn away by the action of wind, water, and gravity is:

- a) Sedimentation
- b) Erosion
- c) Abrasion
- d) Development

50. The settling out of soil particles transported by water and wind is called:

- a) Abrasion
- b) Mud
- c) Sedimentation
- d) Erosion

51. The four processes of overland erosion are:

- a) Detachment, Transport, Settling, & Deposition
- b) Raindrop(Splash), Sheet, Rill, & Gully
- c) Clearing, Grading, Cutting, & Filling
- d) Raindrop, Rill, Transport, & Deposition

52. When installing erosion control nets or blankets, work from the ____ toward the ____.

- a) truck / chow-line
- b) bottom / top
- c) center / edges
- d) top / bottom

53. When sodding a slope, start at the _____ and work toward the _____.

- a) Beginning / end
- b) Center / edges
- c) Top / bottom
- d) Bottom / top

54. Stormwater Retention basin is designed to allow the storage volume to recover through percolation and evaporation in how many hours?

- a) 24 Hours
- b) 48 Hours
- c) 72 Hours
- d) 120 Hours

55. What is the first thing to install during site clearing and grading?

- a) Office trailer
- b) Landscaping
- c) Perimeter controls
- d) Sanitary facilities

56. During the building construction stage, two concerns for the inspector are:

- a) Increased traffic & excavation
- b) Vandalism & theft
- c) Bad food & gambling
- d) Bad attitudes and hurt feelings

57. When should sediment control BMPs be removed?

- a) After 14 days
- b) When they are needed on another job
- c) When the inspector & superintendent agree that the area is stabilized
- d) After 7 days

58. Unless otherwise specified, when should accumulated sediments be removed from a sediment control BMP?

- a) At 90 % capacity
- b) At 75 % capacity
- c) At 50 % capacity
- d) At 25 % capacity

59. In dealing with the public it is most important to follow proper legal procedures of your company and to always be _____ and _____ .

- a) Courteous & fair
- b) Assertive & aggressive
- c) Charming and witty
- d) Humble & apologetic

60. Where and how often should the inspector write a report?

- a) At Starbucks once a week or after a half inch rain event and order one grande latte on ice
- b) Once a week in your office by copying last week's inspection report
- c) On site, and only should you see noncompliance problem
- d) At the construction site, and every seven calendar days or after a half inch rain event

61. When you arrive at the construction site, you should start your inspection by ?

- a) Driving through the site and complete your inspection form and notes in your truck
- b) Start at the lowest discharge point sampling with your turbidity meter and work your way back to the highest point on the job site
- c) Walking along the roadway and completing your inspection
- d) Completing your inspection report from the construction site trailer in the air condition

62. What does undercutting of a silt fence indicate?

- a) Lack of soil cohesion
- b) Improper installation
- c) Burrowing animals
- d) The flap is too short

63. What do gullies in a channel bottom indicate?

- a) Too much velocity for the selected channel lining
- b) Too many people walking over the channel bottom
- c) Lack of commitment
- d) Deliberate noncompliance

64. What parts of a stormwater pond are most likely to fail due to improper compaction?

- a) Burrowing animals
- b) Aquatic plants
- c) Ornamental plants
- d) Structural elements (i.e. pipes)

65. What is the purpose of an exfiltration trench?

- a) Dewater site
- b) Provide below ground retention
- c) Pre-treat runoff
- d) Stabilize slopes

66. The key to efficient and cost-effective erosion control is to plan construction activities in _____ to reduce the erosion potential of the site.

- a) Cities
- b) Phases
- c) Wetlands
- d) Georgia

67. Pollution source control planning on an active construction site should cover the following elements:

- a) Storage of construction materials, chemicals and waste
- b) Vehicle wash areas
- c) Equipment maintenance and repair
- d) All the above

68. _____ are the last line of defense and one of the most visible and maintenance-intensive BMPs on an active construction site.
- a) Erosion controls
 - b) Non-structural controls
 - c) Perimeter controls
 - d) Trees
69. A silt fence should only be installed for sediment capture under _____ conditions.
- a) channel flow
 - b) hurricane
 - c) sheet flow
 - d) all of the above
70. When properly installing a silt fence, a trench shall be excavated approximately _____, backfilled and compacted.
- a) 4 inches deep and 4 inches wide
 - b) 8 inches deep
 - c) 4 inches deep
 - d) 8 inches deep and 8 inches wide
71. A _____ is intended to divert overland sheet flow to a stabilized outlet or a sediment- trapping facility during the establishment of permanent stabilization on sloping, disturbed areas.
- a) stabilized construction exit
 - b) check dam
 - c) baffle
 - d) temporary diversion berm
72. Various storm drain inlet protection devices are available for different applications depending on the site conditions and type of inlet; however, all are for drainage areas no greater than _____ acre(s).
- a) 1
 - b) 5
 - c) 10
 - d) 15
73. If a sediment basin is designed as a permanent structure, the bottom of the basin should be excavated to 6-12 inches higher than the eventual bottom of the retention to ensure _____ once construction is complete.
- a) removal of accumulated sediments
 - b) engineer approves the final pond
 - c) ponds collect water
 - d) good fishing habitat

74. Which best management practices can be used in live streams?

- a) silt fence
- b) check dams
- c) concrete washouts
- d) none of the above

75. Three examples of structural stormwater BMPs are:

- a) education, street sweeping & concrete washouts.
- b) exfiltration trenches, swales & retention ponds.
- c) silt fence, concrete washout & exfiltration trenches.
- d) retention ponds, detention ponds & temporary construction exits.

76. Three examples of non-structural stormwater BMPs are:

- a) education, street sweeping & concrete washouts.
- b) exfiltration trenches, swales & retention ponds.
- c) silt fence, concrete washout & exfiltration trenches.
- d) retention ponds, detention ponds & temporary construction exits.

77. Dewatering methods for managing nonstormwater discharges and removing accumulated stormwater from depressed areas at a construction site include:

- a) sediment traps and basins
- b) weir tanks
- c) chemical treatment
- d) all the above

78. When using chemical treatment systems for dewatering, a key point to remember is:

- a) the right chemical at the right dosage.
- b) set it and forget it.
- c) dilution is the solution to pollution.
- d) none of the above.

79. Prior to discharge, each batch of chemically treated stormwater must be sampled and tested for compliance with _____.

- a) pH limits
- b) turbidity limits
- c) pH and turbidity limits
- d) none of the above

80. Which type of permit integrates stormwater quantity and quality, as well as wetland protection requirements, into a single permit?

- a) NPDES Stormwater Construction Generic Permit
- b) Generic Permit for the Discharge of Produced Groundwater
- c) Florida Environmental Resource Permit (ERP)
- d) local building permit

81. When conducting a site inspection, you should always complete the inspection form(s):

- a) As soon as you return to your office
- b) No more than 5 days after the inspection
- c) Same day as inspection at the local coffee shop
- d) While on the job site every time

82. Upon completion of this class when does your certification expire as a “Qualified Stormwater Management Inspector?”

- a) 1 year
- b) 5 years
- c) 10 years
- d) It does not expire

83. Sediments should be removed before they reach _____ of the original height of the any BMP.

- a) 25 %
- b) 40 %
- c) 50 %
- d) 70 %

*Please answer the following questions as **True (T)** or **False (F)***

84. Your erosion control plan is the same as your SWPPP.
85. Best Management Practices (BMPs) are not necessary for a site smaller than one acre.
86. A stand of permanent grass vegetation is considered established after two mowing events.
87. Mulching, seeding, and sodding are examples of soil stabilization methods.
88. Maximizing the amount of soil that is exposed on a construction site is an effective way to prevent and control erosion.
89. Clogged fish gills and reduced light for aquatic plants are examples of biological effects of erosion and sedimentation.
90. Sediment control practices require less maintenance than erosion control practices.
91. Curb inlet protection devices should have an overflow space to prevent flooding.
92. Physical impacts of erosion are inexpensive and easily managed.
93. You don't have to control erosion on projects smaller than one acre.
94. Inspectors should let contractors know immediately if there is a problem with their site's erosion and sediment control measures.
95. Under the NPDES program you have 30 days to repair a damaged silt fence.
96. Vegetative cover plays an extremely important role in controlling erosion.
97. Silt and sand are the two soils that cause turbidity issues in Florida.
98. Rain events less than 0.50 inches do not require a NPDES inspection.
99. Temporary construction entrances need at least 6 inches of stone thickness to properly support vehicle weight.
100. A paved flume should have hydrostatic relief holes when seasonal high-water table or seepage from slopes is a concern.

**PLEASE COMPLETE THE INSTRUCTOR EVALUATION
FORM IN THE BACK OF YOUR COURSE MANUAL AND TURN
IT IN WITH YOUR EXAMINATION ANSWER SHEET AND BOOKLET.**

THANK YOU FOR ATTENDING!