Concrete Finisher

RED SEAL EXAM PACKAGE

1. Consists of crushed stone larger than 1/4 in. (6.4mm).

   (A) Fine Aggregates / Sand
   (B) Aggregates
   (C) Transit mixed concrete
   (D) Coarse Aggregates / Gravel

2. Prompt repairs or specialized investigations for safety-critical defects

   (A) Bonding Requirement
   (B) Hand Labour
   (C) In-depth Inspection
   (D) Immediate Safety Concerns

3. You should discard any mortar not used within how many hours?

   (A) 5 hours
   (B) 3 days
   (C) 2 1/2 hours
   (D) 1 hour

4. In general concrete construction, the physical interlock between cement paste and aggregate, or between concrete and reinforcement (specifically, the sliding resistance of an embedded bar and not the adhesive resistance).

   (A) Mechanical Bond
   (B) Realkalization
   (C) Anchor, Bonded
   (D) Acceptance Test

5. F-number testing should be preferably done within _____ hours after concrete placement, but never later than _____ hours after concrete placement.

   (A) 6 and 24
   (B) 36 and 96
   (C) 24 and 72
   (D) 12 and 48

6. After the waiting period, floating is done to:

   (A) embed large aggregate particles beneath the surface mortar layer
   (B) remove slight humps to produce a plane, level surface
   (C) all
   (D) compact and further consolidate the surface in preparation for other finishing

7. Sandblasting should not be done earlier than 24 hours after concrete is placed. Blasting before then will loosen the aggregate and remove too much of the surface material. After ____ hours, the concrete will harden to the point where it will be difficult to evenly expose aggregate with this method. To get uniform results on a large project, all surfaces should be sandblasted at the same time after placing.

   (A) 94
   (B) 10
   (C) 72
   (D) 73

8. A consistency of a shotcrete mixture containing the maximum amount of water such that the product will not flow or sag after placement.

   (A) Open-Circuit Potential
   (B) Continuous Mixer
   (C) Acceptance Test
   (D) Impending Slough

9. Measure of concrete's ability to withstand axial loads.

   (A) Durability
   (B) Hydration
   (C) Compressive Strength
   (D) System Design

10. Applied to concrete surface, affordable but may age differently.

    (A) Design Possibilities
    (B) Formwork
    (C) Integral Color
    (D) Dust-on Color

11. Duration for concrete to harden and gain initial strength

    (A) Hydration
    (B) Concrete Set Time
    (C) Finishing
    (D) Concrete Hardening

12. Which finishing operations affect floor flatness?

    (A) setting time, air content, slump
    (B) form setting and screeding
    (C) Floating, restraightening, troweling
    (D) control the tilt of the head to keep the blade as flat as possible

13. The change in cross-sectional area of a material as it elongates.

    (A) Tacky
    (B) Roving
    (C) Sounding
    (D) Necking

1041. A defect induced by discontinuous flow velocities and lack of proper consolidation during placement of concrete by pumping.

(A) Silica Fume
(B) Bentonite
(C) Flow Line
(D) Mineral Filler

1042. The separation of overwet or over vibrated concrete into horizontal layers with increasingly lighter material toward the top; a layered structure in concrete resulting from placement of successive batches that differ in appearance.

(A) Fibers, Steel
(B) Strengthening
(C) X-Ray Diffraction
(D) Stratification

1043. An additive used to increase surface tension and reduce foaming tendencies, particularly in admixtures and materials applied by roller coating equipment.

(A) Tendon, Bonded
(B) Acoustic Emission
(C) Antifoaming Agent
(D) Alkali-Silica Reaction

1044. Achieved using rough-sawn boards or plastic materials as formwork linings.

(A) Smooth Finishes
(B) Painted Rendered Finishes
(C) Tyrolean Finish
(D) Textured Finishes

1045. When concrete is placed by crane and bucket, buckets must never be lifted over _____ or over _____ paths.

(A) water sources or drainage
(B) vehicles or equipment
(C) construction materials or debris
(D) personnel or travel

1046. Tool used to remove high or low spots and compact concrete

(A) Mechanical float
(B) Hand float
(C) Darby float
(D) Concrete float

1047. Include protection/appearance and load-carrying categories

(A) Surface Repair Types
(B) Repair Materials Compatibility
(C) Durable Repair Material
(D) Surface Repair Performance

1048. A method for removal of concrete by means of hydraulic forces that split concrete into smaller masses.

(A) Galvanic Cell
(B) Hydraulic Splitting
(C) Cement, Portland
(D) Surface Impregnants

1049. Includes asphalt, vinyl, rubber, and linoleum tiles/sheets.

(A) Resilient Floor Finish
(B) Wood Floor Finish
(C) Ceiling Finishes
(D) Paint Finishes

1050. Sequential steps including inspection and repair

(A) Phases of Repair Projects
(B) Analysis of Repair Problem
(C) Extent of Damage Evaluation
(D) Quality Repair Requirements

1051. Process of concrete gaining strength and durability over time

(A) Screeding
(B) Concrete Initial Set
(C) Concrete Hardening
(D) Cement Paste

1052. High-strength steel, most commonly strand, wire, or bars used to impart permanent prestress forces to concrete.

(A) Water-Cementitious Material Ratio
(B) Steel Reinforcement, Prestressing
(C) Copper-Copper Sulfate Half Cell
(D) Minimum-Film-Forming Temperature

1053. Used to match specific arcs for concrete installation.

(A) Benderboard
(B) Edging And Jointing
(C) Formwork
(D) 28-day Cure