

BRAINWARE UNIVERSITY

Term End Examination 2021 - 22 Programme – Diploma in Civil Engineering Course Name – Advanced Construction Techniques and Equipment Course Code - DCE604 A (Semester VI)

(Selles)	ter vi)
Γime allotted : 1 Hrs.15 Min.	Full Marks : 60
[The figure in the margi	n indicates full marks.]
Grou	up-A
(Multiple Choice	Type Question) 1 x 60=60
Choose the correct alternative from the following:	
(1) The cement concrete, from which entrained air an it	nd excess water are removed after placing
a) Vacuum concrete	b) LWC
c) Prestressed concrete	d) Sawdust concrete
(2) Aerated Concrete is	
a) Very heavy weight	b) Heavy weight
c) Medium weight	d) Light weight
(3) Density of no fines concrete with light weight ag	gregate vary from kg/m3.
a) 1600-1900	b) <300
c) >2500	d) >300
(4) lightweight concrete can be used in	
a) air-conditioned buildings	b) non-load bearing walls
c) providing a reduced thickness of the structure	d) all of the above
(5) concreting in hot weather will result in	
a) increased strength	b) increased cracking
c) retard setting	d) unevenness
(6) shotcrete is used in the application of	

(7) ready mixed concrete (RMC) is (i) specified in terms of performance parameters (ii) produced under factory conditions (iii) produced and supplied by weight the correct answer is

a) soil stabilization

c) stabilization of rock slopes

b) waterproofing

d) none of the above

a) (i) and (ii)	b) (i) and (iii)
c) (ii) and (iii)	d) (i), (ii) and (iii)
(8) Light-weight concrete may be produced by	
a) using lightweight aggregate	b) incorporating air bubble in concrete
c) omitting sand fraction	d) all of the above
(9) lightweight concrete is used	
a) for reducing the dead weight of structures	b) in filler wall panels in highrise buildings
c) for improving thermal insulation	d) any of the above
(10) aerated concrete is produced by addition of	
a) sodium silicate	b) copper sulphate
c) aluminium powder	d) zinc
(11) in polymer concrete (resin concrete) the polymeric	zation can be achieved by
a) thermal-catalytic reaction	b) catalyst-promoter reaction
c) radiation	d) all of the above
(12) shotcrete differs from conventional concrete with	regard to
a) material, proportions and void system	b) compaction
c) application procedure	d) all of the above
(13) method is not in common use in case	e of placing concrete underwater.
a) Tremie	b) Grouting
c) Guniting	d) Spreading
(14) The is a mixture of cement and sand,	the usual proposition being 1:3.
a) Grout	b) Mortar
c) Slurry	d) Gunite
(15) It is observed that in cold weather, the curing is _ setting of concrete.	in the initial stages of the
a) Moderate	b) Slow
c) High	d) Fast
(16) is the inner surface of Arch.	
a) Intrados	b) Soffit
c) Crown	d) Haunch
(17) consists of Steel angles or rolled	d Steel joists.
a) RCC Lintels	b) Steel Lintels
c) Wood Lintels	d) Timber Lintels
(18) arrangement helps in improving the the quality of concrete.	e appearance of the face and also reduces
a) Rebated boot lintel	b) D.P.C.
c) RCC	d) Reboot Lintel
(19) stairs are light in weight, they are mos	stly used for residential buildings.
a) Timber	b) Stone
c) Marble	d) Cantilever
(20) It is found that moisture content of about formwork.	is appropriate for the timber

a) 0.2	b) 0.3
c) 0.4	d) 0.5
(21) A window should be located on the view of fresh air.	side of a room as seen from the point of
a) Eastern	b) Northern
c) Western	d) Southern
(22) gives excellent exposed concrete treatment.	e surface requiring no further finishing
a) Timber	b) Teak wood
c) Steel	d) Fibre glass
(23) The formwork should be neither	too dry nor too wet.
a) Fibre glass	b) Steel
c) Timber	d) Metal
(24) The formwork can be reused sever formwork.	ral time as compared to ordinary Timber
a) Sunmica	b) Cardboard
c) Fibre ply	d) Plywood
(25) In case of formwork for the floor, thebottom.	_ supports should be firmly supported at the
a) Horizontal	b) Vertical
c) Inclined	d) Slanting
(26) The formwork for consists of sh	eets, studs, Wales, ties and braces.
a) Column	b) Beams
c) Walls	d) Stairs
(27) Which of the following rules is used in order to	o select the location of a window?
a) Height of window = 1/8 (width of room + breadth of room)	b) Breadth of window = 1/8 (width of room + height of room)
c) Length of window = 1/8 (width of room + breadth of room)	d) Width of window = 1/8 (height of room + breadth of room)
(28) is the vertical outer member of the shu	itter.
a) Style	b) Top rail
c) Lock rail	d) Bottom rail
(29) is the top horizontal member	of a shutter.
a) Head	b) Top rail
c) Style	d) Sill
(30) The cement concrete in which high compressivactual use, is called	ve stress are artificially induced before its
a) Plain cement concrete	b) Prestressed cement concrete
c) Lime concrete	d) Prestressed cement concrete
(31) Workability of concrete for a given water cont	ent is good if the aggregates are
a) Rounded aggregate	b) Irregular aggregate
c) Angular aggregate	d) Flaky aggregate
(32) The mixer, which produces a steady stream of known as	concrete as long as it is in operation, is

a) non-tilling batch mixer	b) tilting type batch mixer
c) continuous mixer	d) none of these
(33) The process of mixing, transporting, placing and not take more than	compacting the cement concrete should
a) 30 minutes	b) 60 minutes
c) 90 minutes	d) 120 minutes
(34) For concreting of tunnel lining, the concrete is tra	ansported by
a) pumps	b) pans
c) wheel barrows	d) containers
(35) In transportation of concrete by pumps	
a) the slump should not be less than 50 mm and more than 80 mm	b) the water cement ratio should remain between 0.5 to 0.65
c) the number of bends in a pipe line should be as small as possible	d) all of the above
(36) The diameter of the pipe line used for transportate exceed	tion of concrete by pumps should not
a) 10 cm	b) 30 cm
c) 20 cm	d) 25 cm
(37) To prevent segregation, the concrete should not be	be thrown from a height of more than
a) 1/2 m	b) 1 m
c) 1.5 m	d) 2 m
(38) Which of the following types of concrete mixture concretefactories?	e is most commonly used in precast
a) truck mounted mixture	b) pan type mixer
c) dual drum mixture	d) tilting drum mixture
(39) When vibrators are used for compaction, the con	sistency of concrete depends upon the
a) type of mix	b) placing conditions
c) efficiency of vibrator	d) all of these
(40) The levelling operation that removes humps and surface is called	hollows and give a true, uniform concrete
a) screeding	b) floating
c) trowelling	d) compacting
(41) The final operation of finishing the concrete surf	ace is called
a) screeding	b) floating
c) trowelling	d) none of these
(42) The process of hardening the concrete mixes by period is called	keeping its surface moist for a certain
a) floating	b) curing
c) screeding	d) none of these
(43) Which of the following tools is used for cutting s	soft bricks?
a) Jointer	b) Scutch
c) Spirit level	d) Trowel
(44) Which of the following is provided on the horizon	ontal shores when one building is higher

than the other?	
a) Flying shore	b) Pile Underpinning
c) Pit Underpinning	d) Raking shore
(45) Which of the following is a mixture of cement, s which, when placed in the skeleton of forms and stone?	
a) Cement mortar	b) Cement grouting
c) Cement concrete	d) Cement slurry
(46) Which of the following is a non combustible but expansion?	ilding material with low coefficient of
a) Glass	b) Asbestos cement
c) Brick	d) Sandstone
(47) The temporary framework is known as demolition, maintenance or repair works.	and it is useful in construction
a) Underpinning	b) Shoring
c) Scaffolding	d) Grouting
(48) is the most common type of scaffe construction of brickwork.	olding and is widely used in the
a) Suspended scaffolding	b) Single scaffolding
c) Trestle scaffolding	d) Steel scaffolding
(49) In type of scaffolding, the working contrivances such as Ladders, tripods, etc., mountain	
a) Trestle scaffolding	b) Cantilever scaffolding
c) Mason's scaffolding	d) Bricklayers scaffolding
(50) have been developed for determining	ng the load bearing capacity of piles.
a) Wave action theory	b) Empirical formulas
c) Static formulas	d) Dynamic formulas
(51) The equate the soil resistance to the	e bearing power of the pile.
a) Dynamic formulas	b) Wave action theory
c) Static formulas	d) Empirical formulas
(52) Identify the given pile driving formula. $R = (W1)$	\times H)/S \times W1/(W1+W2)
a) Dutch formula	b) Eytelwein formula
c) Hiley formula	d) Engineering News formula
(53) Who introduced the bar charts?	
a) Williams henry	b) Henry Gantt
c) Jane Gantt	d) Joseph henry
(54) The full form of PERT is	
a) Program Evaluation and Rate Technology	b) Program Evaluation and Robot Technique
c) Program Evaluation and Robot Technology	d) Program Evaluation and Review Technique
(55) The full form of CPM is	
a) Critical Path Method	b) Control Path Method
c) Critical Plan Management	d) Control Path Management
(56) are used to represent activity in a new	twork diagram.

b) Squares d) Arrows he achieved under ideal circumstances
,
ha achieved under ideal circumstances
be achieved under ideal circumstances
b) Optimistic time estimate
d) The most likely time estimate
planners, the maximum time that
b) Optimistic time estimate
d) Expected time estimate
e and the actual time needed to
b) Independent float
d) Half float
f materials and labour needed for one
b) Standard Data Book
d) Specific Data Record
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