

2251C

Roll No.

GUJARAT WATER SUPPLY & SEWERAGE BOARD , GANDHINAGAR

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Professional Examination for Assistant Executive Engineer(Civil) /
Deputy Ex.Engineer (Civil)

Name of Subject:- GENERAL ENGINEERING (CIVIL)

Date - 14-10-2015 Time - 10-30 to 13-30

Max. Marks - 25

Marks Obtain

Instruction :- You are monitored by CCTV, if any person observed copying shall be considered disqualified for entire examination.

PART - A (to be returned) - 25 marks

Objective Question : - 1 mark for each question, Attempt all questions.

Please tick the answer in box. To be completed in 45 minutes.

1 The estimated time required to perform an activity is known

- | | | |
|---|----------|--------------------------|
| a | event | <input type="checkbox"/> |
| b | dummy | <input type="checkbox"/> |
| c | duration | <input type="checkbox"/> |
| d | float | <input type="checkbox"/> |

2 Critical path moves along the activities having total float

- | | | |
|---|----------|--------------------------|
| a | positive | <input type="checkbox"/> |
| b | negative | <input type="checkbox"/> |
| c | zero | <input type="checkbox"/> |
| d | same | <input type="checkbox"/> |

3 Maximum Water cement ratio for severe exposure for M-30 grade concrete as per IS- 456-2000 is

- | | | |
|---|------|--------------------------|
| a | 0.45 | <input type="checkbox"/> |
| b | 0.50 | <input type="checkbox"/> |
| c | 0.40 | <input type="checkbox"/> |
| d | 0.55 | <input type="checkbox"/> |

4 No.of samples required for testing of concrete of 45 m³ of concrete quantity as per IS-456-2000 is

- | | | |
|---|---|--------------------------|
| a | 3 | <input type="checkbox"/> |
| b | 4 | <input type="checkbox"/> |
| c | 5 | <input type="checkbox"/> |
| d | 2 | <input type="checkbox"/> |

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5 The minimum reinforcement for water retaining structure as per IS -3370 for each surface zone shall not be less than

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|---|-------|--------------------------|
| a | 0.35% | <input type="checkbox"/> |
| b | 0.24% | <input type="checkbox"/> |
| c | 0.40% | <input type="checkbox"/> |
| d | 0.64% | <input type="checkbox"/> |

6 Code for OPC 53 grade is

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|---|----------|--------------------------|
| a | IS -269 | <input type="checkbox"/> |
| b | IS-12269 | <input type="checkbox"/> |
| c | IS-10262 | <input type="checkbox"/> |
| d | IS -8112 | <input type="checkbox"/> |

7 Efflorescence in cement is caused due to an excess of

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|---|------------|--------------------------|
| a | Alumina | <input type="checkbox"/> |
| b | Iron oxide | <input type="checkbox"/> |
| c | Alkalies | <input type="checkbox"/> |
| d | Silica | <input type="checkbox"/> |

8 A flakky aggregate is said to be elongated if its length is

- | | | |
|---|--------------------------|--------------------------|
| a | equal to mean size | <input type="checkbox"/> |
| b | 1.8 times mean size | <input type="checkbox"/> |
| c | thrice the mean size | <input type="checkbox"/> |
| d | four times the mean size | <input type="checkbox"/> |

9 The standard sand used to check compressive strength of cement is obtained from

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|---|--------------------|--------------------------|
| a | Jaipur (Rajasthan) | <input type="checkbox"/> |
| b | Jullandhar(Punjab) | <input type="checkbox"/> |
| c | Hydrabad(A.P) | <input type="checkbox"/> |
| d | Ennore (Madras) | <input type="checkbox"/> |

10 Floating foundation is a type of

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|---|-------------------|--------------------------|
| a | Well foundation | <input type="checkbox"/> |
| b | raft foundation | <input type="checkbox"/> |
| c | pile foundation | <input type="checkbox"/> |
| d | none of the above | <input type="checkbox"/> |

11 Sheet piles are

- | | | |
|---|------------------|--------------------------|
| a | non load bearing | <input type="checkbox"/> |
| b | load bearing | <input type="checkbox"/> |
| c | both of above | <input type="checkbox"/> |
| d | none of above | <input type="checkbox"/> |

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12 The specific gravity of sand is approximately

- a 1.6
- b 2.6
- c 2.4
- d 2.2

13 The ultimate bearing capacity of a soil is

- a Total load on bearing area
- b Safe load on bearing area
- c Load at soil fails
- d Load at which soil consolidate

14 The plasticity index is numerical difference between

- a Liquid limit and plastic limit
- b Plastic limit and shrinkage limit
- c Liquid limit and shrinkage limit
- d none of these

15 Dampness causes

- a Efflorescence
- b Bleaching of paints
- c crumbling of plaster
- d growth of termites

16 Raft foundation are generally preferred to when area required for individual footing is more than

- a 25 % of total area
- b 30 % of total area
- c 40 % of total area
- d 50 % of total area

17 A good quality stone absorbs water less than

- a 5%
- b 10%
- c 15%
- d 20%

18 The portion of the brick without triangular corner equal to half the width and half the length is called

- a closer
- b queen closer
- c king closer
- d squint bricks

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19 Good quality cement contains higher percentage of

- a Tricalcium silicate
 - b Di-calcium silicate
 - c Tricalcium aluminate
 - d Tetra calcium alumino ferrite
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20 To construct 10 cm thick partition wall ,you will prefer

- a English bond
 - b Flemish bond
 - c Header bond
 - d strecher bond
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21 Weight of 20 mm dia round bar is

- a 2.47 kg/m
 - b 2.98 kg/m
 - c 1.58 kg/m
 - d 2.10 kg/m
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22 Cement consumption in bag for 10 cum of cc 1:2:4 is

- a 63.50
 - b 84.75
 - c 45.75
 - d none of above
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23 The most useless aggregate is one whose surface texture is

- a smooth
 - b granular
 - c glassy
 - d honey combed
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24 The vertical side member of a shutter frame is known

- a style
 - b mullion
 - c reveal
 - d post
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25 Bulking of sand is caused due to

- a surface moisture
 - b Air voida
 - c clay content
 - d viscosity
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