

SSC JE MAINS 2019

Civil Engineering

At Just



Starting 10 November



Validity: 4 Months



8 Test Series Worth rps 799/-









Q) Water formed transported soil is: [TNPSC AE 2015 /UPPCL AE 2019 / DMRC AM 2007/GUJRAT PSC AE – II 2017 / WBPSC AE 2012 /BPSC AE PAPER V 2006]

A: Loess

B: glacier

C: Alluvial

D: Marine

- Q) The engineering of soil is not related to the construction of:
- [UPPSC STATE ENG. AE 2007 (II)]
- [UPPSC STATE ENG AE 2003]
- A: Highways
- **B: Ropeways**
- C: Railways
- **D: Tramways**

Q) Flocculent structure is found in

A: Gravels

B: Coarse sands

C: Silts

D: Clays

Q) A soil composed of loose granular graded material which can be scoured off with the material which can be scoured off with the same ease with which it is deposited is known as-

[UKPSC AE 2013 PAPER -I]

A: Silty loam

B: Incoherent alluvium

C: Sandy clay

D: Regime silt

Q) In which soil structure are the particles arranged more or less parallel to each other?
[LMRC AE 2017 I-SHIFT LMRC AM 2005]

A: Single grained

B: Honeycomb

C: Flocculent

D: Dispersed

Q) Match List-I with List-II and select the correct answer using the codes given below the lists:

List-I (soil Type)	List-II (characteristic)
A. Oolitic sand	1. Under-consolidated
B. Biogenetic sand	2. Rounded
C. Calcareous clay	3. Cemented
D. Soft clay	4. Crushing

[HPPSC AE 2016]

Codes:

A: 2, 4, 3, 1

B: 2, 1, 3, 4

C: 2, 1, 4, 3

D: 2, 3, 4, 1

- Q) Consider the following statement in the context of Aeolian soils:
- [GPSC AE CLASS (1 & 2) PAPER 2 2017)
- (i) The soil has low density and low
- (ii) The soil is deposited by wind
- (iii) The soil has large permeability
- Which of these statement are correct?
- A: (i), (ii) and (iii)
- B: (ii) and (iii)
- **C: (i) and (iii)**
- D: (i) and (ii)

- Q) The soils most susceptible to liquefaction are-[Gujrat PSC AE (N.W.R) 2020]
- A: Saturated dense sands
- B: Saturated fine and medium sands of uniform particle size
- C: Saturated clays of uniform size
- D: Saturated gravels and cobbles

- Q) Which of the following soil structure is possible for cohesionless soils?
- [Gujrat PSC AE (N.W.R) 2020]
- A: Single grained structure
- **B:** Honey-comb structure
- C: Flocculated structure
- D: Dispersed structure

Q) Soils which are formed by the decomposition of rocks are called as-

[Gujrat PSC AE (N.W.R.) 2020]

A: Alluvial soils

B: Lateritic soils

C: Desert soils

D: Black cotton soils

Q) Sedimentary deposits consisting of alternate thin layers of silt and clay are called as-

[Gujrat PSC AE (N.W.R.) 2020]

A: Dispersive clays

B: Expansive clays

C: Calcareous clays

D: Varved clays

Q) Colluvial soils (Talus) are transported by:

[UPPCL AE 2017]

A: Water

B: Wind

C: Gravity

D: Ice

- Q) Which is the geological cycle for the formation of soil?
- [Rajashan nagar nigam AE shift 2 2016]
- A: Transportation Upheaval Weathering Deposition
- B: Weathering Transportation Deposition Upheaval
- C: Weathering Upheaval Transportation Deposition
- D: Upheaval Transportation Deposition Weathering

Q) The branch of geology which deals with various aspects of rocks is called

[GPSC AE JUNE 2019]

A: Lithology

B: Mineralogy

C: Petrology

D: Rockology

Q) The average density of earth may be taken as [GPSC AE JUNE 2019]

A: 5.51 g/cc

B: 5.51 kg/cc

C: 3.9 g/cc

D: 3.9 kg/cm

- Q) Identify the true statements from the following: [GPSC AE DEC 2018]
- A: Lateritic soil is a category of organic soil
- B: Water held firmly to the clay particles has the same properties as ordinary water
- C: A soil transported by gravitational force is called tatus
- D: A clay deposit which exhibits no evidence of fissuring
- is described as intact

Q) Inorganic clays have specific gravity usually between following range

[GPSC AE JANUARY 2018]

A: 2.70 to 2.80

B: 1.65 to 2.65

C: 2.40 to 2.50

D: 2.90 to 3.00

Q) The volume of soil to be excavated in its in-place natural state is called

[GPSC AE JANUARY 2018]

A: Compacted cubic meter

B: Basic cubic meter

C: Bank cubic meter

D: Natural cubic meter

Q) Which of the following soil contains high organic content?

[UPPCL AE 2019]

A: Peat

B: Varved clay

C: Silty clay

D: Well graded sand

Q) The texture of sand stone is-

[Rajashan VP ITI 2018]

A: Porphyritic

B: Conglomerate

C: Vesicular

D: Clastic

Q) An object that has no size but has mass an is assumed to be a single point is space:

[IRCON AE 2017]

A: Continuum

B: Point force

C: Rigid body

D: Particle

Q) Which of the following parameters can be used to estimate the angle of internal friction of sandy soil? [ARUNACHAL PRADESH POLY TECH 2019]

A: Particle size

B: Roughness of particle

C: Particle size distribution

D: Density index

Q) If 'A' = The maximum void ratio of the soil in the loosest condition, 'B' is the minimum void ratio of the soil in the densest condition and 'C' is the void ratio in the natural state, then the relative density is given by[Gujrat PSC AE (N.W.R.) 2020]

A:
$$(A-C) / (A - B)$$

B:
$$(A - B) / (A - C)$$

C:
$$(B - C) / (B - A)$$

D:
$$(B - A) / (B - C)$$

Q) A saturated undisturbed sample from a clay strata has moisture content of 22.22 % and specific weight of 2.7.

Assuming $\Upsilon_w = 10 \text{ kN/m}^3$, the void ratio and the saturated unit weight of the clay, respectively are

A: 0.6 and 16.875 kN/m³

B: 0.3 and 20.625 kN/m³

C: 0.6 and 16.625 kN/m³

D: 0.3 and 16.975 kN/m³

Q) A soil sample has a shrinkage limit of 10% specific gravity of soil solids as 2.7. The porosity of the soil at shrinkage limit is:

[KPSC AE 2020 / GPSC AE CLASS (1 & 2) Paper -2 2017 ese 1995]

A: 21.2%

B: 30%

C: 52.7%

D: 70%

- Q) Which of the following gives the correct decreasing order of the densities of a soil sample? BPSC AE 2019 paper (v) section-I GPSC AE (class 1 & 2) 2019]
- A: Saturated, submerged, wet, dry
- B: Saturated, wet, submerged, dry
- C: Saturated, wet, dry, submerged
- D: Wet, saturated, submerged, dry

Q) Relative density of a compacted dense sand is approximately equal to [OPSC AE – 2016 (II) OPSC AEE 2015 PAPER-I UPRVUNL AE 2014 (RPSC ACF 2011)]

A: 0.4

B: 0.6

C: 0.95

D: 1.20

- Q) Which one of the following statement is correct? (UPRVUNL AE 2015)
- A: Grain size is the primary criterion for classification of coarse, as well as fine grained soil
- B: Grain size is the primary criterion for classification of coarse grained soil
- C: Plasticity curve classifies coarse grained soil
- D: Plasticity characteristics relate to classification of coarse grained soil

- Q) An engineer find suitable sand for embankment filling observes that a particular type of 0% what can be conclude from this?
- A: Sand is in its loosest state
- B: Sand is in its densest state
- C: Sand is in intermediate state of compaction
- D: This sand cannot be further compacted