



# SSC JE MAINS 2019

*Civil Engineering*

At Just

₹3499/-

Free  
8 Test Series  
Worth rps 799/-



**Starting 10 November**



**Validity : 4 Months**

 Telegram Channel  
**EVEREXAM TECH**

DOWNLOAD  
EVEREXAM APP



[www.everexam.org](http://www.everexam.org)

**8595517959**



# SSC JE PRE 2020

- ✓ PDF Notes
- ✓ Validity 5 Months
- ✓ With **Free 3000+** Question Practice Batch

At Just **2199/-**

# SSC JE MAINS 2019

- ✓ PDF Notes
- ✓ Validity 4 Months
- ✓ With **Free 8** Test Series Worth rps **799/-**

At Just **3499/-**

## Combo Pack **Diwali** Offer

~~@ 5698/-~~ @ **4499/-**



TELEGRAM CHANNEL  
**EVEREXAM TECH**

DOWNLOAD  
EVEREXAM APP



[www.everexam.org](http://www.everexam.org)

**8595517959**

**Q:) Which of the following stones falls under metamorphic category?**

**A: Sandstone**

**B: Granite**

**C: Marble**

**D: Basalt**

**Q:) A good brick earth should contain alumina in the following limit**

**A: 5-10%**

**B: 20-30%**

**C: 40-50%**

**D: 60-70%**

**Q:) During slacking action of lime the volume**

**A: Increases**

**B: Decreases**

**C: Remains same**

**D: None of the above**

**Q:) Rate of increase of compressive strength of  
puzzolanic cement as compared to portland cement  
during first week of setting remains**

**A: Slow**

**B: Fast**

**C: Random**

**D: None of the above**

**Q:) If water cement ratio in a concrete is increased then compressive strength**

**A: Increases**

**B: Decreases**

**C: Remains same**

**D: None of the above**

**Q:) The size of cubical mould for testing compressive of cement shall be**

**A: 150mm**

**B: 100mm**

**C: 70.6mm**

**D: 50mm**



**Q:) The core of cross section of an exogenous tree is called**

**A: Sapwood**

**B: Pith**

**C: Heartwood**

**D: Inner bark**

**Q:) Which of the following range of pigment volume concentration number is recommended for paint for prime coat on metal?**

**A: 25-40**

**B: 40-50**

**C: 50-60**

**D: 60-70**

**Q:) The softening point of various bituminous grades in (degree centifgrade) for paving jobs vary between**

**A: 10-20**

**B: 20-30**

**C: 35-70**

**D: 70-100**

**Q:) The marshall stability value for bituminous mixes for heavy traffic shall be not less than**

**A: 710 kg**

**B: 810 kg**

**C: 910 kg**

**D: 1010 kg**

**Q:) Deflection due to bending moment in a regular beam of uniform cross section is proportional to:**

**A: EI**

**B:  $1 / EI$**

**C:  $1 / EI^2$**

**D:  $(EI)^2$**

**Q:) Deflection of tip of a cantilever beam of span length, L carrying uniformly distributed load, q is:**

**A:  $qL^2/24 EI$**

**B:  $qL^2/12 EI$**

**C:  $qL^2/8 EI$**

**D:  $qL^2/6 EI$**

**Q:) A rubber bar of length 1.5 m and 200 mm diameter is stretched along its length by 20 mm by a force of 15 kN. As a result its diameter is reduced by 2 mm. The poisons' ratio of the bar material will be:**

**A: 5**

**B: 1**

**C: 0.75**

**D: 0.5**

**Q:) A structure is subjected to different set of loads, and then sum of deflections under each set of loads acting separately is equal to total deflection of the structure due to different set provided loads are within:**

**A: Elastic limits including buckling**

**B: Proportional limits without buckling**

**C: Elastic limit**

**D: Limit state**



**Q:) Moment of inertia of a rectangular flat (length, L and width, B) about its axis parallel to its length at a distance  $B/2$  from its top face is:**

**A:  $BL^3/6$**

**B:  $LB^3/6$**

**C:  $LB^3/12$**

**D:  $BL^3/12$**

**Q:) A simply supported beam of span  $L$ , is subjected to two point loads (each of magnitude  $P$ ) at a distance of  $L/3$  from either support, the maximum bending moment in the beam will be**

**A:  $PL$**

**B:  $PL/2$**

**C:  $PL/3$**

**D:  $PL/4$**

**Q:) A rectangular beam has width 120 mm and depth 500 mm. The moment of inertia about an axis at mid depth parallel to width will be:**

**A:  $15 \times 10^4 \text{mm}^4$**

**B:  $12 \times 10^4 \text{mm}^4$**

**C:  $125 \times 10^6 \text{mm}^4$**

**D:  $125 \times 10^7 \text{mm}^4$**

**Q:) A column of length 1.5 m is pinned at both ends has radius of gyration 150mm. The slenderness ratio will be:**

**A: 150**

**B: 100**

**C: 10**

**D: 5**

**Q:) A simply supported beam (span L) is subjected to uniformly distributed load, p throughout the span. The rotation at each will be:**

**A:  $pL^3/48EI$**

**B:  $pL^3/24EI$**

**C:  $pL^3/12EI$**

**D:  $pL^3/8EI$**

**Where EI is flexible rigidity**

**Q:) In a simply supported beam, maximum shear stress in a triangular cross-section (altitude  $h$ ) occurs at a distance:**

**A:  $h/3$  from bottom of beam**

**B:  $h/3$  from top of the beam**

**C:  $h/6$  from neutral axis**

**D:  $h/5$  from top the beam**

**Q:) Error due to bad ranging is**

**A: Comprensating**

**B: Cumulative positive**

**C: Cumulative negative**

**D: Both (2) and (3)**

**Q:) True meridians**

**A: Converge at a point called pole**

**B: Are parallel to each other**

**C: Converge near equator**

**D: None of these**



**Q:) Absence of spherical aberration in a telescope is called**

**A: Achromation**

**B: Chromitation**

**C: Aplanation**

**D: Ablation**

**Q:) 'Polet of curve' of a simple circular curve is**

**A: Point of commencement**

**B: Point of tangency**

**C: Point of inter-section**

**D: All of these**

**Q:) The method of surveying in which field work and plotting work are done simultaneously is called**

**A: Compass surveying**

**B: Chain surveying**

**C: Levelling**

**D: Plane tabling**

**Q:) Which of the following errors can be eliminated by reciprocal measurements in differential leveling?**

**I Error due to earth curvature**

**II Error due to atmospheric refraction**

**A: Both I and II**

**B: I only**

**C: II only**

**D: Neither I nor II**

**Q:) If bearing of a line AB is  $N 60^{\circ}$  and that of BC is  $122^{\circ}$  of a closed traverse ABCDS, then measure of the interior angle B, is**

**A:  $240^{\circ} 30'$**

**B:  $122^{\circ} 00'$**

**C:  $118^{\circ} 30'$**

**D:  $150^{\circ}$**

**Q:) The contour lines merge or cross one another on the map in case of**

**A: Vertical surfaces**

**B: Overhang ground surfaces**

**C: Cave**

**D: All of these**

**Q:) The process of bringing vertical circle to the right of the observer if it is originally to the left and vice-versa is called**

**A: Face left**

**B: Face right**

**C: Changing face**

**D: All of these**

**Q:) Cross hairs in surveying telescope are fitted**

**A: At the centre of telescope**

**B: In the objective glass**

**C: In front of eye piece**

**D: Any where between objective and eye piece**



**Q:) The centre line method of estimating is used for**

**A: Octagonal buildings**

**B: Hexagonal buildings**

**C: Circular buildings**

**D: All of these**

**Q:) The measurement of D.P.C (damp proof course) is done in**

**A: Meters**

**B: Cubic meters**

**C: Square meters**

**D: None of the above**

**Q:) Following items are measured in kg.**

**A: Expanded metal wire netting**

**B: M.S. Reinforcement of R.C.C. works**

**C: M.S. grills provided in roof over courtyard**

**D: Rolling shutters**

**Q:) Due to change in price level, a revised estimate is prepared if the sanctioned exceeds**

**A: 2.0%**

**B: 2.5%**

**C: 4.0%**

**D: 5.0%**

**Q:) The expected out turn of cement concrete 1:2:4 per mason per day is**

**A: 1.5 m<sup>3</sup>**

**B: 2.5 m<sup>3</sup>**

**C: 3.5 m<sup>3</sup>**

**D: 5.0 m<sup>3</sup>**

**Q:) Lacustrine soil are soil**

**A: Deposited in lake beds**

**B: Deposited in sea beds**

**C: Transported by glaciers**

**D: Transported by river and streams**

**Q:) The ratio of volume of air voids to the volume of the total voids is known as**

**A: Porosity**

**B: Air content**

**C: Percentage voids**

**D: Percentage air voids**

**Q:) Valid range for the degree of saturation (S) of soil in percentage is**

**A:  $S \geq 0$**

**B:  $0 > S > 100$**

**C:  $0 \geq S \geq 100$**

**D:  $S < 0 < S < 0$**



**Q:) A soil has a bulk density of  $22 \text{ KN/m}^3$  and water content of  $10\%$  . The dry density of soil in  $\text{KN/m}^3$**

**A: 19**

**B: 20**

**C: 21**

**D: 22**

**Q:) A pycnometer is used to determine**

**A: Voids ration and dry density**

**B: Water content and voids ratio**

**C: Specific gravity and dry density**

**D: Water content and specific gravity**



**Has Launched New Course**

# SSC JE PRE 2020



**At Just ₹2199 With Free 3000+ Question Practice Batch**



**TELEGRAM CHANNEL  
EVEREXAM TECH**

**DOWNLOAD  
EVEREXAM APP**



**www.everexam.org**

**8595517959**