Q. In an RRC section of effective depth ' $d$ ', if vertical stirrups are provided to resist shear, their maximum spacing measured along the axis of the member as per IS: 456-2000 should not exceed
(a) 0.25 d
(b) 0.50 d
(c) 0.75 d
(d) 1.00 d

## YouTuhe CHANNEL


Q. If $\tau_{\mathrm{v}}$ is nominal shear stress, $\tau_{\mathrm{c}, \text { max }}$ is the maximum design shear strength of concrete, which of the following statement is correct?
(a) If $\boldsymbol{\tau}_{\mathrm{v}}>\boldsymbol{\tau}_{\mathrm{cmax}}$, section is to be designed for shear.
(b) If $\tau_{\mathrm{v}}>\boldsymbol{\tau}_{\mathrm{cmax}}$, minimum shear reinforcement is to be provided.
(c) If $\tau_{v}<\tau_{c}$, minimum shear reinforcement is to be provided.
(d) if $\tau_{v}>\tau_{c}$, minimum shear reinforcement is to be provided.
Q. Deep beams are designed for-
(a) Shear force only
(b) Bending moment only
(c) Both shear force and bending moment
(d) bearing
Q. Which one of the following statements is correct?
(a) Shear cracks start due to high diagonal tension in case of beams with their webs and high prestressing force.
(b) Shear design for a prestressing concrete beam is based on elastic theory
(c) In the zone where bending moment is dominant and shear is insignificant, cracks occur at 20 degree to $\mathbf{3 0}$ degree.
(d) After diagonal cracking, the mechanics of shear transfer in a prestressed concrete member is very much different from that in reinforced concrete members.


## Q. Tension bars in a cantilever beam must be anchored

 in the support up to(a) $L_{d}$
(b) $L_{d} / 3$
(c) $12 \emptyset$
(d) d

Q. The length of the straight portion of a bar beyond the end of the hook should be at least
(a) Twice the diameter
(b) Thrice the diameter
(c) Four times the diameter
(d) Seven times the diameter

## YouTuhe CHANNEL


Q. The bearing stress at bends for limit state method compared to working stress method of design is
(a) 1.5 times more
(b) 2.5 times more
(c) 2.5 times les
(d) 1.5 times less

## YouTuhe CHANNEL


Q. If the average bending stress is $6 \mathrm{~kg} / \mathrm{cm}^{2}$ for M15 grade concrete, the length of embedment of a bar of diameter $\mathbf{d}$ according to IS 456 specification is
(a) 28 d
(b) 38 d
(c) 48 d
(d) 58 d

## YouTuhe CHANNEL


Q. Bending moment co-efficient and shear co-efficient for continuous beams of uniform cross-section as per Is:456 (table 12 and 13) may be used only when spans do not differ to the longest span by :
(a) $15 \%$
(b) $20 \%$
(c) $10 \%$
(d) $12 \%$

YouTube CHANNEL

Q. The cross section of a strip footing is shown below:


The quantity of 150 thick PCC (1:3:6) per meter length of footinh is:
a.0.094 Sq.m

1` b. 0.094 cu.m
c.0.625 sq.m

YouTulhe Cind d. $\mathbf{0 . 6 2 5} \mathbf{m}$

Q. The following document contains detailed description of all items of work excluding their quantities along with the current rates:
a. Analysis of rates

B Tender document
C. Abstract estimate
d.Schedule of rate

## YouTuhe CHANNEL


Q. Indicating works left in excavated trenches to
facilitate the measurement of borrow pits are known as
a.Jambs
b. Posts
c. Tell-Tales
d. None of these

## YouTuhe CHANNEL


Q. The information which cannot be included in drawing is conveyed to the estimator through
a.Specifications
b. Cover note
c. Progress chart
d. None of these

## YouTube CHANNEL


Q. In case of steel rolling shutters, for the estimation of painted area; the plain area is multiplied by
a. 0.75
b. 1.1
c. 1.25
d. 1.50

