QUESTION PAPER 2015
(ANDHRA PRADESH)

101. An equilateral triangular plate of base b and height h is immersed in water such that the base is on the surface of the liquid. The centre of pressure below the water surface is at a depth of

(a) $\frac{3h}{4}$ (b) $\frac{h}{3}$

(c) $\frac{h}{2}$ (d) $\frac{2h}{3}$

102. Bernoulli's theorem is based on the principle of conservation of

(a) Mass

(b) Momentum

(c) Energy (d) Force

103. The piezometric head is the summation of

(a) Velocity head and pressure head

(b) Pressure head and elevation head

(c) Elevation head and velocity head

(d) Velocity head, pressure head and elevation head

104. If V_1 and V_2 are the velocities of flow before and after sudden enlargement in a pipe, the loss of head is given by

(a) $\frac{V_1^2 - V_2^2}{2 V_1 V_2 g}$ (b) $\frac{V_1^2 - V_2^2}{2g}$

(c) $\frac{V_2^2 - V_1^2}{2g}$ (d) $\frac{V_1^2 - V_2^2}{2 V_1 V_2}$

105. The discharge through a rectangular notch varies as

(a) H (b) $H^{1/2}$

(c) $H^{3/2}$ (d) $H^{5/2}$

106. A pipe of diameter D and length L is carrying a fluid with a velocity V. If the density of fluid is ρ and the dynamic viscosity is μ, then the Reynold's number is

(a) $\frac{VDL}{\mu}$ (b) $\frac{\rho VD}{\mu}$

(c) $\frac{VD\mu}{\rho L}$ (d) $\frac{\rho V\mu}{D}$

107. Specific speed of a Kaplan turbine ranges between

(a) 30 and 60

(b) 60 and 300

(c) 300 and 600

(d) 600 and 1000

108. The hydraulic mean depth of an open channel (A : cross sectional area, T : top width and P : wetted perimeter) is given by

(a) $\frac{P}{A}$ (b) $\sqrt{\frac{A^3}{T}}$

(b) $\sqrt{\frac{A}{P}}$ (d) $\frac{A}{P}$

109. The open channel section is considered as most economical when

(a) The section with minimum roughness coefficient

(b) The section that has a maximum area for a given flow

(c) The section that has a minimum wetted perimeter

(d) The section that has a maximum wetted perimeter

110. A rectangular section will be most economical when

(a) Depth of flow is equal to the bottom width

(b) Depth of flow is equal to half the bottom width

(c) Depth of flow is equal to 1.5 times the bottom width

(d) Depth of flow is equal to twice the bottom width

111. Delta (Δ) in cm, Duty (D) in hectare/cumec and Base period (B) in days are related as

(a) $\Delta = \frac{864\,B}{D}$

(b) $B = \frac{864\,D}{\Delta}$

(c) $B = \frac{864\,\Delta}{D}$

(d) $D = \frac{864\,B}{\Delta}$

112. A spinkler irrigation system is suitable when

(a) The land gradient is steep and the soil is easily erodible

(b) The soil is having low permeability

(c) The water table is low

(d) The crops to be grown have deep roofs

113. An isohyets is a line joining points of

(a) Equal temperature

(b) Equal humidity

(c) Equal rainfall depth

(d) Equal evaporation

114. Intensity of rainfall is

(a) Total rainfall in a period

(b) Rainfall per unit area

(c) Volume of water collected per unit time

(d) Depth of rainfall per unit time

115. Ryve's formula for measurement of velocity of flow in streams is given by

(a) $Q = C.A^{2/3}$ (b) $Q = C.A^{3/2}$

(c) $Q = C.A^{3/4}$ (d) $Q = C.A^{4/3}$

116. Along a phreatic line in an earth dam

(a) The total head is constant but not zero

(b) The total head is everywhere zero

(c) The pressure head is everywhere zero

(d) The pressure head is constant but not zero

117. In case of gravity dam the main overturning force is

(a) Self weight of the dam

(b) Wind pressure

(c) Water pressure

(d) Wave pressure

118. Balance depth of cutting of canal is

(a) Half the total depth of a canal

(b) Half of full supply depth

(c) The maximum out that an excavator can take

(d) Where volume of cutting is equal to volume of filling

119. In Lacey's regime theory, the velocity, of flow is proportional to

(a) Qf^2 (b) Q/f^2

(c) $(Qf^2)^{1/6}$ (d) $(Q/f^2)^{1/6}$

120. An aqueduct is a cross drainage work in which

(a) A canal is carried over the drainage channel

(b) A drainage channel is carried over the canal

(c) Both drainage channel and canal are at the same level

(d) A canal is carried below the highway

121. Poisson's ratio is defined as the ratio of

(a) Longitudinal stress and longitudinal strain

(b) Lateral strain and longitudinal strain.

(c) Lateral stress and lognitudinal stress

(d) Lateral stress and longitudinal strain

122. Factor of safety is the ratio of

(a) Yield stress to working stress

(b) Ultimate stress to yield stress

(c) Ultimate load to yield load

(d) Working stress to yield stress

123. Solid uniform bar of cross sectional area A and length L is hanging vertically from its upper end. If W is the total weight of bar and E is the modulus of elasticity, the elongation of bar due to self weight is

(a) $\frac{WL}{AE}$ (b) $\frac{WL}{2AE}$

(c) $\frac{WL}{4AE}$ (d) $\frac{2WL}{AE}$

124. A square bar of side 20 mm and length 2m is subjected to a pull of 10 kN. If the modulus of elasticity of the material of the bar is 2×10^5 N/mm^2. The clongation of the bar is

(a) 4.0mm (b) 1.0mm

(c) 0.5mm (d) 0.25mm

125. The relationship between Young's Modulus (E), Modulus of Rigidity (G) and Bulk Modulus (K) in an elastic material is given by the relation

(a) $E = \frac{9KG}{3K+G}$

(b) $E = \frac{3KG}{3K+G}$

(c) $E = \frac{9KG}{9K+G}$

(d) $E = \frac{3KG}{9K+G}$

126. For a simply supported beam on two end supports, the bending moment is maximum

(a) Usually on the supports

(b) Always at mid span

(c) Where there is no shear force

(d) Where the deflection is maximum

127. A concentrated load P acts on a simply supported beam of span L at a distance L/3 from the left support. The bending moment at the point of application of the load is given by

(a) $\frac{PL}{3}$ (b) $\frac{2PL}{3}$

(c) $\frac{PL}{9}$ (d) $\frac{2PL}{9}$

128. The point of contraflexure is a point where

(a) Shear force changes sign

(b) Bending moment changes sign

(c) Shear force is maximum

(d) Bending moment is maximum

129. The maximum B.M caused on a simply supported beam subjected to two equal concentrated load W/2 spaced at equal distance (L/3) over the span is

(a) $\frac{WL}{6}$ (b) $\frac{5WL}{36}$

(c) $\frac{WL}{8}$ (d) $\frac{3WL}{20}$

130. A cantilever beam of length L is subjected to a uniformly distributed load of w per m run for half of span from the free end. The maximum bending moment at the support is

(a) $\frac{3WL^2}{8}$ (b) $\frac{wL^2}{2}$

(c) $\frac{wL^2}{4}$ (d) $\frac{wL^2}{8}$

131. The flexure formula (with usual notations) for simple theory of bending is given by

(a) $\frac{M}{I}=\frac{\sigma}{R}=\frac{E}{y}$ (b) $\frac{M}{I}=\frac{\sigma}{y}=\frac{E}{R}$

(c) $\frac{M}{I}=\frac{y}{\sigma}=\frac{E}{R}$ (d) $\frac{M}{E}=\frac{I}{y}=\frac{\sigma}{R}$

132. A cantilever beam of length L having T shaped cross-section carries uniformly distributed load. The maximum magnitude of the bending stress occur.

(a) At the top of cross-section

(b) At the Junction of flange and Web

(c) At the mid-depth point

(d) At the bottom of the section

133. The section modulus of a rectangular beam of width 100 mm and depth 200 mm in mm^3 is

(a) 0.33×10^6 (b) 0.66×10^6

(c) 1.5×10^6 (d) 3.0×10^6

134. A beam of circular cross section of diameter D is subjected to a shear force F. The maximum shear stress in a section is

(a) $\frac{4F}{3D^2}$ (b) $\frac{4F}{3\pi D^2}$

(c) $\frac{16F}{3\pi D^2}$ (d) $\frac{16F}{3D^2}$

135. For a given shear force across a symmetrical 'I' section, the intensity of shear stress is maximum at the

(a) Extreme fibres

(b) Centroid of the section

(c) At the junction of the flange and the web, but on the web

(d) At the junction of the flange and the web, but on the flange

136. A beam of rectangular section having cross sectional area 100 mm^2 is subjected to a transverse shear force of 6 kN. The magnitude of the maximum shear stress developed in the section is

(a) 90 N/mm^2 (b) 80 N/mm^2

(c) 60 N/mm^2 (d) 45 N/mm^2

137. The shape of the shearing stress distribution across a rectangular cross section subjected to tranverse loading is

(a) Triangular

(b) Parabolic

(c) Rectangular

(d) A combination of rectangular and parabolic shape

138. If a solid shaft or diameter d is subjected to a torque T, then the maximum shear stress induced is

(a) $\frac{32T}{\pi d^4}$ (b) $\frac{32T}{\pi d^3}$

(c) $\frac{16T}{\pi d^3}$ (d) $\frac{16T}{\pi d^4}$

139. The product of shear modulus (G) and polar moment of inertia (J) is

(a) Flexural rigidity

(b) Torsional rigidity

(c) Axial rigidity

(d) The torque which develops unit twist per unit length

140. A solid shaft rotating at 150 rpm is subjected to torque of 1500 Nm. The power transmitted by the shaft in H.P is

(a) 20π (b) 10π

(c) 2π (d) π

141. A cantilever beam of span 2 L is subjected to a concentrated load of W at the free end. The maximum deflection at the free end is

(a) $\frac{WL^2}{2EI}$ (b) $\frac{WL^3}{3EI}$

(c) $\frac{WL^3}{2EI}$ (d) $\frac{8WL^3}{3EI}$

142. A simply supported beam of span L is subjected to a uniformly distributed load of W per m run throughout. The deflection at mid span is :

(a) $\frac{1}{48}\frac{WL^4}{EI}$ (b) $\frac{5}{384}\frac{WL^4}{4EI}$

(c) $\frac{7}{384}\frac{WL^4}{6EI}$ (d) $\frac{5}{768}\frac{WL^4}{8EI}$

143. A cantilever beam of span L is subjected to a uniformly distributed load of W per m run throughout. The deflection at free end is

(a) $\frac{WL^4}{3EI}$ (b) $\frac{WL^4}{4EI}$

(c) $\frac{WL^4}{6EI}$ (d) $\frac{WL^4}{8EI}$

144. A simply supported beam of span L is subjected to a concentrated load of W at mid span. The deflection under the concentrated load is

(a) $\frac{WL^3}{48EI}$ (b) $\frac{WL^3}{8EI}$

(c) $\frac{WL^3}{16EI}$ (d) $\frac{5}{384}\frac{WL^3}{EI}$

145. The radius of gyration of a circular column of diameter D is

(a) D (b) $\frac{D}{2}$

(c) $\frac{D}{3}$ (d) $\frac{D}{4}$

146. The slenderness ratio of column is the ratio of

(a) Length of column to radius of gyration
(b) Length of the column to least radius of gyration
(c) Effective length of column to the least radius of gyration
(d) Effective length of column to least moment of inertia

147. Euler's formula is applicable to
(a) Short columns
(b) Medium columns
(c) Long columns
(d) Any column

148. The Euler's buckling load for a column of length L fixed at one end and free at the other end is 40 kN. If both the ends of the column is now fixed, the Euler's buckling load will be
(a) 40 kN (b) 80 kN
(c) 320 kN (d) 640 kN

149. If P_E is Euler's load, P_c is crippling load for short column in which there is no buckling land, P_R is the Rankine's crippling load for a column, then
(a) $P_R = P_E + P_C$
(b) $P_R = \frac{1}{P_E} + \frac{1}{P_C}$
(c) $\frac{1}{P_R} = \frac{1}{P_E} + \frac{1}{P_C}$
(d) $\frac{1}{P_R} = \frac{1}{P_E} - \frac{1}{P_C}$

150. Euler's crippling load for a column of length L and Flexural rigidity EI with one end fixed and other end hinged is
(a) $\frac{4\pi^2 EI}{L^2}$ (b) $\frac{2\pi^2 EI}{L^2}$
(c) $\frac{\pi^2 EI}{L^2}$ (d) $\frac{\pi^2 EI}{4L^2}$

151. A uniform beam of span L is rigidity fixed at both supports. It carries a uniformly distributed load W per unit length. The bending moment at mid span is
(a) $\frac{WL^2}{8}$ (b) $\frac{WL^2}{12}$
(c) $\frac{WL^2}{16}$ (d) $\frac{WL^2}{24}$

152. A fixed beam of span L is subjected to a concentrated load of W at mid span. The fixed end moment induced at support is
(a) $\frac{WL}{4}$ (b) $\frac{WL}{6}$
(c) $\frac{WL}{8}$ (d) $\frac{WL}{12}$

153. A propped cantilever of span 4 m is fixed at A and propped at B. The beam carries a uniformly distributed load of 10 kN/m over the entire span. The reaction at B is
(a) 25 kN (b) 20 kN
(c) 10 kN (d) 15 kN

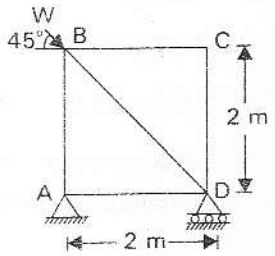
154. A simply supported beam of length L is loaded by a uniformly distributed load of W per unit length over the entire span. It is propped at the mid span so that the deflection at the centre is zero. The reaction at the prop is
(a) $\frac{5}{6}$ WL (b) $\frac{1}{2}$ WL
(c) $\frac{5}{8}$ WL (d) $\frac{1}{10}$ WL

155. A fixed beam of span L is rigidly fixed at both supports A and B. It carries a concentrated load of W which is at a distance of a from support A and b from support B. The fixed end moment at support A is

(a) $\frac{Wab^2}{L^2}$ (b) $\frac{Wa^2b}{L^2}$

(c) $\frac{Wab^2}{8L^2}$ (d) $\frac{Wa^2b}{8L^2}$

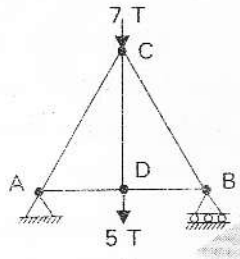
156. Force in the member AB of the frame shown in the given figure will be



(a) Zero (b) W

(c) $W\sqrt{2}$ (d) $\frac{W}{\sqrt{2}}$

157. For the pin jointed frame shown in figure, the force in the vertical member CD is



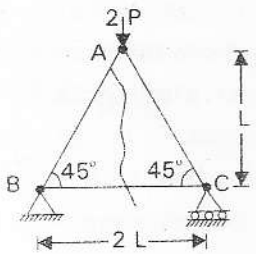
(a) 12 T (tension)

(b) 2 T (compression)

(c) 7 T (Compression)

(d) 5 T (tension)

158. A simple plane truss acted upon by a load 2 P at the apex A is as shown in figure. The axial force in the member AB is



(a) P (b) $\sqrt{2}$ P

(c) $\frac{\sqrt{3}}{2}$ P (d) $\sqrt{3}$ P

159. Which one of the following rules ascertains the maximum permissible eccentricity of loads on rectangular section so that the stresses will always be compressible

(a) Middle fourth rule

(b) Middle third rule

(c) Middle half rule

(d) Middle two third rule

160. For masonry dam of base width b, at which location with respect to the central line, should the resultant loading intersects the sections to avoid tension in any section?

(a) Outside of b/6

(b) Outside of b/8

(c) Within b/6

(d) Within b/8

161. As per the provisions of IS : 456-2000, the (Short term) modulus of elasticity of M 25 grade concrete (in N/mm^2) can be assumed to be

(a) 25000 (b) 28500

(c) 3000 (d) 36000

162. The minimum grade of concrete to be used as per IS : 456-2000 for a reinforced concrete structure to be constructed along a sea coast is

(a) M 15 (b) M20

(c) M25 (d) M30

163. The minimum area of tension reinforcement in a beam shall be greater than

(a) $\frac{0.85\,bd}{f_y}$ (b) $\frac{0.85\,f_y}{bd}$

(c) $0.04\,bd$ (d) $\frac{0.4\,bd}{y}$

164. The characteristic strength of concrete is defined as that compressive strength below which not more than

(a) 2 % of results fall

(b) 5% of results fall

(c) 10% of results fall

(d) 95% of results fall

165. In the limit state design method of concrete structures, the recommended partial material safety factor (γ_m) for steel according to IS : 456-2000 is

(a) 1.5 (b) 1.15

(c) 1.00 (d) 0.87

166. In limit state design, permissible bond stress in the case of deformed bars is more than that in plain bars by

(a) 25% (b) 40%

(c) 50% (d) 60%

167. The limiting compressive strain in concrete is

(a) 0.0035 (b) 0.0015

(c) 0.0025 (d) 0.015

168. A doubly reinforced concrete beam has effective cover d to the centre of compression reinforcement. X_u is the depth of neutral axis, and d is the effective depth to the centre of tension reinforcement. The maximum strain in concrete at the level of compression reinforcement is

(a) $0.0035\,(1 - d'/d)$

(b) $0.0035\,(1 - d'/X_u)$

(c) $0.002\,(1 - d'/X_u)$

(d) $0.002\,(1 - d'/d)$

169. A T beam behaves as a rectangular beam of width equal to its flange of its neutral axis

(a) Coincides with centroid of reinforcement

(b) Coincides with centroid of T-Section

(c) Remains within the flange

(d) Remains in the web

170. In a singly reinforced beam, if the tensile steel reaches its maximum allowable stress earlier than concrete, the section is known as

(a) Under-reinforced section

(b) Over-reinforced section

(c) Balanced section

(d) Economic section

171. A reinforced concrete column is subjected to combined action of compressive axial force and bending moment. If ε_c is the least compressive strain in the member, f_y is the yield stress of steel and E_s is the modulus of elasticity of steel, the maximum permissible compressive strain in concrete member will be

(a) 0.002

(b) $0.002 + \frac{f_y}{1.15 E_s}$

(c) $0.0035 - 0.75 \varepsilon_c$

(d) 0.0035

172. Minimum clear cover (in mm) to the main steel bars in slab, beam, column and footing respectively are

(a) 10, 15, 20, 25

(b) 15, 25, 40, 75

(c) 20, 25, 30, 40

(d) 20, 35, 40, 75

173. The lateral ties in a reinforced concrete rectangular column under axial compression are used to

(a) Avoid the buckling of the longitudinal steel under compression

(b) Provide adequate shear capacity

(c) Provide adequate confinement to concrete

(d) Reduce the axial deformation of the column

174. Limit state of serviceability for deflection including the effects due to creep, shrinkage and temperature occuring after erection of partitions and application of finishes as applicable to floors and roofs is restricted to

(a) $\frac{\text{Span}}{150}$ (b) $\frac{\text{Span}}{200}$

(c) $\frac{\text{Span}}{250}$ (d) $\frac{\text{Span}}{350}$

175. In case of two-way slab, the limiting deflection of the slab is

(a) Primarily a function of the long span

(b) Primarily a function of the short span

(c) Independent of long or short spans

(d) Dependent on both long and short spans

176. Side face reinforcement is provided in a beam when the depth of web exceeds

(a) 300 mm (b) 450 mm

(c) 500 mm (d) 750 mm

177. What is the value of minimum reinforcement (in case of Fe 415) in a slab?

(a) 0.1% (b) 0.12%

(c) 0.15% (d) 0.2%

178. The design depth of the footing for an isolated column is governed by

(a) Maximum bending moment

(b) Maximum shear force

(c) Punching shear

(d) All the above

179. If σ_{cbc} is permissible compressive stress in flexural compression in N/mm^2 in service, the modular ratio is of the order of

(a) $\frac{280}{3\sigma_{cbc}}$ (b) $\frac{280}{4\sigma_{cbc}}$

(c) 19 (d) 13

180. Permissible bending tensile stress in high yield strength deformed bars of grade 415 N/mm^2 in a beam to be designed by working stress method is

(a) 230 N/mm^2 (b) 190N/mm^2

(c) 140 N/mm^2 (d) 130N/mm^2

181. A triangle is said to be well conditioned when its angles are between

(a) 20° and 120°

(b) 40° and 120°

(c) 30° and 120°

(d) 45° and 135°

182. The length of a line, measured with a 30m chain, was found to be 300 m.If the chain was 0.1m too short.The true length of the line will be

(a) 300.1 m (b) 301.0m

(c) 299.0 m (d) 310.0m

183. The line passing through zero declination is known as

(a) Isogonic line

(b) Agonic line

(c) Contour line

(d) Isoclinic line

184. If the FB of a line is $334^\circ 45'$. Then the BB of a line is

(a) $144^\circ 45'$ (b) S 25° 15'E

(c) $115^\circ 15'$ (d) S 25° 15'W

185. If bearing of a line AB is $150^\circ 40'$ and angle ABC is $120^\circ 10'$ then the bearing of line CB will be

(a) $90^\circ 50'$ (b) $89^\circ 10'$

(c) $30^\circ 30'$ (d) $29^\circ 20'$

186. If the magnetic bearing of a line is S $48^\circ 40'$ E and the magnetic declination at that place is $4^\circ 10'$ E, the true bearing of a line is

(a) S $52^\circ 50'$ E

(b) S $52^\circ 50'$ W

(c) S $44^\circ 30'$ E

(d) S $44^\circ 30'$ E

187. The staff reading taken on a point of known elevation is

(a) Fore sight (FS)

(b) Back Sight (BS)

(c) Intermediate Sight (IS)

(d) Height o Instrument (HI)

188. RL of floor of a building is 100.0 m, staff reading on the floor is 1.625 m and staff reading when it is held inverted with bottom touching the ceiling of a hall is 2.870 m, then the height of the ceiling above the floor is

(a) 3.593 m (b) 3.953 m

(c) 4.594 m (d) 4.495 m

189. When consecutive contour lines run close together indicates

(a) Steep slope (b) Flat slope

(c) Gentle slope

(d) Inclined Surface

190. Fine adjustment of a theodolite in done by the

(a) Tangent Screw

(b) Clamp screw

(c) Focussing screw

(d) Foot screws

191. An imaginary line passing through the optical center of the object glass and the optical center of the eye piece is

(a) Line of Collimation

(b) Axis of the telescope

(c) Axis of the bubble tube

(d) Horizontal axis

192. In Bowdith's rule, it is assumed that the error is proportional to

(a) Length of a line (L)

(b) Square of length of a line (L^2)

(c) Square root of length of a line ($\sqrt{L}$)

(d) Inverse of the length of a line (1/L)

193. If N be the number of sides of a closed traverse, then the sum of measured interior angles should be equal to

(a) $(2N - 4) \times 90^\circ$

(b) $(2N + 4) \times 90^\circ$

(c) $(2N - 1) \times 90^\circ$

(d) $(2N + 4) \times 90^\circ$

194. The stadia diaphragm is provided in theodolite for measuring

(a) Elevation

(b) Bearing

(c) Horizontal angle

(d) Horizontal distance

195. A total station is

(a) A digital theodolite

(b) An electronic theodolite

(c) An electronic theodolite fitted with stadia wires

(d) An electronic theodolite fitted with electronic distance meter

196. A fluid is one which can be defined as a substance that

(a) Has that same shear stress at all points

(b) Can deform indefinitely under the action of the smallest shear force

(c) Has the small shear stress in all directions

(d) Is practically incompressible

197. The unit of dynamic viscosity is

(a) $N\text{-}s/m^2$ (b) $N/s\text{-}m^2$

(c) N/m^2 (d) m^2/s

198. Which of the following forces act on a fluid at rest?

(a) Hydrostatic force

(b) Gravity force

(c) Viscous force

(d) Surface tension

199. Multi U-tube manometers with different fluids are used to measure

(a) Low pressures

(b) Medium pressures

(c) High pressures

(d) Very low pressures

200. The flow in a pipe whose valve is being opened or closed gradually is an example of

(a) Steady flow

(b) Unsteady flow

(c) Steady uniform flow

(d) Steady non-uniform flow

ANSWERS

(101) c	(102) c	(103) b	(104) b	(105) c	(106) b	(107) c
(108) d	(109) c	(110) b	(111) a	(112) a	(113) c	(114) d
(115) a	(116) c	(117) c	(118) d	(119) c	(120) a	(121) b
(122) a	(123) b	(124) d	(125) a	(126) c	(127) d	(128) b
(129) a	(130) a	(131) b	(132) d	(133) b	(134) c	(135) b
(136) a	(137) b	(138) c	(139) b	(140) b	(141) d	(142) b
(143) d	(144) a	(145) d	(146) c	(147) c	(148) d	(149) c
(150) b	(151) d	(152) c	(153) d	(154) c	(155) a	(156) a
(157) d	(158) b	(159) b	(160) c	(161) a	(162) d	(163) a
(164) b	(165) b	(166) d	(167) a	(168) b	(169) c	(170) a
(171) c	(172) b	(173) a	(174) d	(175) b	(176) d	(177) b
(178) d	(179) a	(180) a	(181) c	(182) c	(183) b	(184) b
(185) c	(186) c	(187) b	(188) d	(189) a	(190) a	(191) b
(192) a	(193) a	(194) d	(195) d	(196) b	(197) a	(198) a
(199) d	(200) b					

SREE ACADEMY

ACADEMY ECET /POLYCET
DIPLOMA TUITIONS
Gaddiannaram X Road,
Dilsukhnagar, Hyderabad.