

A

15RW-13

92. A person bought a pen and sold it for a loss of 10%. If he had bought it for 20% less and sold it for ₹ 44 more than earlier sale price he would have made a profit of 40%. The cost price of the pen is (in ₹)

ఒక వ్యక్తి ఒక కలాన్ని కొని దానిని 10% నష్టానికి విక్రయించాడు. అతడు ఆ కలాన్ని 20% తక్కువ ధరకు కొని మొదటి విక్రయ వెల కన్నా 44 రూ. ఎక్కువకు విక్రయించి వుంటే అతనికి 40% లాభం వచ్చేది. ఆ కలం కొన్న ఖరీదు (రూ. లలో)

- (1) 200 (2) 225
(3) 250 (4) 280

93. If an article is sold at a profit of 15% instead of a profit of 9% the person gets ₹ 60 more. The cost price of the article (in rupees) is

ఒక వస్తువును 9% లాభానికి అమ్మేకన్నా 15% లాభానికి అమ్మితే ఆ వ్యక్తికి 60 రూ. ఎక్కువ వస్తుంది. ఆ వస్తువు కొన్న ఖరీదు (రూ. లలో)

- (1) 1200 (2) 1050
(3) 1000 (4) 800

94. A and B started a business investing ₹ 10 lakhs and ₹ 15 lakhs respectively. After 6 months C joined them by investing ₹ 20 lakhs. If the profit at the end of the year is ₹ 5.6 lakhs, then the share of A in the profit (in lakhs of rupees) is

A, B లు ఒక వ్యాపారాన్ని వరుసగా 10 లక్షల రూ., 15 లక్షల రూ. పెట్టుబడులతో ప్రారంభించారు. 6 నెలల తరువాత C అదే వ్యాపారంలో 20 లక్షల పెట్టుబడితో చేరాడు. సంవత్సరాంతంలో వచ్చిన 5.6 లక్షల రూ. లాభంలో A వాటా (లక్షల రూ. లలో)

- (1) 1.6 (2) 2.4
(3) 3.2 (4) 4.8

95. In a joint business A, B and C invested capital in the ratio 5 : 6 : 8. At the end of the business they shared profits in the ratio 4 : 3 : 12. The ratio of the number of months in which A, B and C kept, their capital is

ఒక ఉమ్మడి వ్యాపారంలో A, B, C లు 5 : 6 : 8 నిష్పత్తిలో మూలధనం పెట్టుబడి పెట్టారు. వ్యాపారాంతంలో వారు లాభాలను 4 : 3 : 12 నిష్పత్తిలో పంచుకొన్నారు. A, B, C లు పెట్టుబడులు పెట్టిన నెలల సంఖ్యల నిష్పత్తి

- (1) 2 : 1 : 3 (2) 5 : 3 : 12
(3) 8 : 5 : 15 (4) 25 : 18 : 16

15RW-13

A

96. Pipe A fills a tank in 8 hours while pipe B empties the full tank in 10 hours. If both the pipes A and B are opened simultaneously the time taken (in hours) to fill the tank is
A పైపు ఒక తొట్టని 8 గంటలలో నింపగలదు. B పైపు నిండిన తొట్టని 10 గంటలలో ఖాళీ చేస్తుంది. A, B రెండు పైపులూ ఒకేసారి తెరిస్తే తొట్ట నిండేందుకు కావలసిన సమయం (గంటలలో)
- (1) $33\frac{1}{2}$ (2) $36\frac{1}{2}$
(3) 40 (4) 42
97. Two pipes A and B can fill a tank in 10 hours and 15 hours respectively. If they are opened alternately for one hour each and if A is opened first, the time (in hours) required to fill the tank is
రెండు పైపులు A, B ల ఒక తొట్టని నింపేందుకు విడివిడిగా 10 గంటలు, 15 గంటలు సమయం తీసుకొంటాయి. ఈ రెండింటినీ ఒకదాని తర్వాత ఒకటి ప్రతి గంటకూ తెరుస్తూ; మొదట A పైపును తెరిస్తే తొట్ట నిండేందుకు పట్టే సమయం (గంటలలో)
- (1) 10 (2) 11
(3) 12 (4) 13
98. If a man starts at A and walks at 5 kmph he will reach B late by 7 minutes. But if walks at 6 kmph he will reach B early by 5 minutes. The distance between A and B (in km) is
ఒక వ్యక్తి A నుండి బయలుదేరి గంటకు 5 కి.మీ. వేగంతో నడిస్తే 7 నిమిషాలు ఆలస్యంగా B ను చేరుతాడు. కాని అతను గంటకు 6 కి.మీ. వేగంగా నడిస్తే 5 నిమిషాలు ముందుగానే B చేరుతాడు. A, B ల మధ్య దూరం (కి.మీ. లలో)
- (1) 4 (2) 5
(3) 6 (4) 7
99. A train of 270 metres long crosses a platform of 390 metres length in 33 seconds. The speed of the train (in kmph) is
270 మీ. పొడవు గల ఒక రైలు 390 మీటర్ల పొడవు గల ప్లాట్‌ఫారం ను దాటేందుకు 33 సెకండ్లు పడితే రైలు వేగం గంటకు (కి.మీ. లలో)
- (1) 66 (2) 68
(3) 72 (4) 75
100. Three persons A, B, C together can complete a work in 8 days where as A alone requires 24 days to complete the same work. The number of days required for B and C together to complete the same work is
మొగ్గురు వ్యక్తులు A, B, C ల కలిసి ఒక పనిని 8 రోజులలో పూర్తి చేయగలరు. కాని A ఒక్కడికీ అదే పనిని పూర్తి చేసేందుకు 24 రోజులు పడుతుంది. B, C ల కలిసి అదే పనిని పూర్తి చేసేందుకు పట్టే రోజుల సంఖ్య
- (1) 18 (2) 16
(3) 12 (4) 10

A

15RW-13

101. A man completes $\frac{4}{5}$ of the work in $1\frac{1}{2}$ days. The number of hours required to complete the remaining work by him is
 ఒక పనిలో $\frac{4}{5}$ వంతు $1\frac{1}{2}$ రోజుల్లో ఒకతను పూర్తి చేయగలడు. మిగిలా పనిని పూర్తిచేయడానికి ఇంకా ఆతనికి కావలసిన వ్యవధి గంటలలో
- (1) 6 (2) 9
 (3) 7 (4) 8
102. A circle is inscribed in an equilateral triangle. If the area of the circle is 462 cm^2 , then the perimeter (in cm) of the triangle is
 ఒక సమబాహు త్రిభుజంలో ఒక వృత్తం అంతర్లిఖించబడినది. వృత్త వైశాల్యం 462 చ.సెం.మీ. అయినచో త్రిభుజం చుట్టుకొలత (సెం. మీ. లలో)
- (1) 72 (2) 84
 (3) 96 (4) 126
103. The area of a rectangular metal sheet is 60 sq.m. The sum of its length and diagonal is equal to 5 times its breadth. Then the difference (in metres) between length and breadth is
 దీర్ఘచతురస్రాకారపు ఒక లోహపు ఫలకం వైశాల్యం 60 చ.మీ. దాని కర్ణం, పొడవుల మొత్తం వెడల్పుకు 5 రెట్లు. అప్పుడు పొడవు, వెడల్పుల భేదం (మీ. లలో)
- (1) 4 (2) 5
 (3) 6 (4) 7
104. A cone of height 24 cm and radius of its base 6 cm is made up of clay. If that clay is reshaped in the form of a sphere, then the diameter of that sphere (in cms) is
 ఎత్తు 24 సెం.మీ. , భూ వ్యాసార్థం 6 సెం.మీ. గా గల ఒక శంకువు బంక మట్టితో చేయబడినది. దాన్ని గోళాకారంగా మలిచినప్పుడు ఆ గోళం వ్యాసం (సెం.మీ. లలో)
- (1) 6 (2) 8
 (3) 12 (4) 14
105. The surface area of a sphere is same as the curved surface area of a right circular cylinder whose height and diameter are 12 cm each. Then the radius of the sphere (in cm) is
 ఎత్తు, భూ వ్యాసాలు ఒక్కోటి 12 సెం.మీ. గల ఒక వృత్తాకార స్థూపపు వక్రతల వైశాల్యానికి సమానంగా ఒక గోళపు ఉపరితల వైశాల్యం ఉంది. అప్పుడు ఆ గోళ వ్యాసార్థం (సెం.మీ. లలో)
- (1) 3 (2) 4
 (3) 5 (4) 6

15RW-13

A

106. Let 's' be the surface area of a cube of edge 9 cm. This cube is cut into smaller cubes of edge 3 cm each. If 'S' is the sum of the surface areas of all the smaller cubes, then $s : S =$

9 సెం.మీ. అంచు గల ఒక ఘనం ఉపరితల వైశాల్యం 's'. 3 సెం.మీ. అంచులను కలిగిన చిన్నవైన ఘనాలగా ఈ ఘనం కత్తిరించబడిన ఈ చిన్న ఘనాలన్నింటి ఉపరితల వైశాల్యాల మొత్తం 'S' అయితే $s : S =$

- (1) 3 : 1 (2) 1 : 3
(3) 3 : 2 (4) 2 : 3

107. The number of revolutions made by a wheel of 42 cm diameter in travelling a distance of 1320 metres is

1320 మీటర్ల దూరం ప్రయాణించడంలో 42 సెం.మీ. వ్యాసంగా గల చక్రం చేసే పరిభ్రమణాల సంఖ్య

- (1) 300 (2) 400
(3) 500 (4) 1000

108. The radius r of a right circular cylinder is the same as that of a sphere. If the volume of the sphere is twice that of the cylinder, then the height of the cylinder is

ఒక స్తూపం భూ వ్యాసార్థం r అనేది ఒక గోళం వ్యాసార్థానికి సమానం. గోళం యొక్క ఘనపరిమాణం స్తూపం ఘనపరిమాణానికి రెట్టింపు అయితే, ఆ స్తూపం ఎత్తు

- (1) $\frac{r}{3}$ (2) $\frac{2r}{3}$
(3) $\frac{4r}{3}$ (4) $2r$

109. The digit in the units place of the number 13^{400} is

సంఖ్య 13^{400} లో ఒకట్ల స్థానపు అంక

- (1) 4 (2) 3
(3) 2 (4) 1

110. If $a^* = k$ denotes that k is the remainder when $8a$ is divided by 7, then $100^* =$

$a^* = k$ లో k అనేది $8a$ ను 7 చే భాగించగా వచ్చు శేషాన్ని సూచిస్తే, $100^* =$

- (1) 1 (2) 2
(3) 5 (4) 6

A

15RW-13

(ii) Algebraic and Geometrical Ability

(Marks : 30)

దీజీయ, జ్యామితీయ సామర్థ్యత

111. For two statements p, q , it is given that $p \rightarrow ((\sim p) \vee q)$ is false, then the truth values of p and q are respectively

p, q లు అనే రెండు ప్రవచనాలకు సంబంధించి $p \rightarrow ((\sim p) \vee q)$ అనేది అసత్యమని ఇస్తే, p, q ల యొక్క సత్య విలువలు వరసగా

- (1) F, T (2) F, F (3) T, T (4) T, F

112. Let p, q be two statements. Then the statement $(\sim p) \vee (p \wedge q)$ is equivalent to

p, q లు ప్రవచనాలను కోండి. అప్పుడు ప్రవచనం $(\sim p) \vee (p \wedge q)$ దీనికి తుల్యం

- (1) $q \Leftrightarrow p$ (2) $p \Rightarrow q$ (3) $q \Rightarrow p$ (4) $p \Rightarrow \sim q$

113. If $1 \leq a \leq 100$ and $A = \{a \mid \gcd(a, 100) = 1\}$, then the number of elements in A is

$1 \leq a \leq 100$, $A = \{a \mid \text{గసాభా}(a, 100) = 1\}$ అయినప్పుడు, A లోని మూలకాల సంఖ్య

- (1) 25 (2) 16 (3) 40 (4) 20

114. Let $f(x) = \begin{cases} x & \text{if } x \in Q \\ 1-x & \text{if } x \in \mathbb{R} - Q \end{cases}$

where Q is the set of all rational numbers.

Then f is

$f(x) = \begin{cases} x & (x \in Q) \\ 1-x & (x \in \mathbb{R} - Q) \end{cases}$ అనుకోండి.

ఇక్కడి Q అకరణీయ సంఖ్యాల సమితి, అప్పుడు f అనేది

- (1) one-one only (2) onto only
అన్వేకం మాత్రమే సంగ్రస్తం మాత్రమే
- (3) one-one and onto (4) neither one-one nor onto
అన్వేకమూ, సంగ్రస్తమూ అన్వేకమూ కాదు, సంగ్రస్తమూ కాదు

115. Suppose A and B are two sets. Then a set, among the following, which is not equal to $A \cup B$, in general, is

A, B లు రెండు సమితులనుకోండి. సాధారణంగా క్రింది వాటిలో $A \cup B$ కు సమం కాని సమితి

- (1) $(A - B) \cup (B - A) \cup (A \cap B)$ (2) $(A^c \cap B^c)$
(3) $(A - B) \cup B$ (4) $A \cup (B - A)$

116. If the lines $3x - ky + 4 = 0$ and $4x + y + 2 = 0$ are perpendicular to each other, then $k^2 - 12k + 4 =$

పరస్పరాలకు $3x - ky + 4 = 0, 4x + y + 2 = 0$ పరస్పరం లంబంగా ఉంటే $k^2 - 12k + 4 =$

- (1) 0 (2) 4 (3) 8 (4) 12

15RW-13

A

117. The length of the line segment intercepted between the axes by the line joining (6, -4) and (-3, 8) is

(6, -4), (-3, 8) లను కలిపే రేఖ నిరూపకాక్షాల మధ్య ఏర్పరిచే, అంతరఖండం పొడవు

- (1) 4 (2) 5 (3) 6 (4) 7

118. $\sin 120^\circ \cos 60^\circ \cot 30^\circ \operatorname{cosec}^2 30^\circ =$

- (1) 0 (2) 3 (3) -1 (4) $\frac{1}{2}$

119. $\tan \theta = \frac{5}{12} \Rightarrow \frac{5 \sin \theta + 4 \cos \theta}{4 \sin \theta + 5 \cos \theta} =$

- (1) $\frac{73}{80}$ (2) $\frac{80}{73}$ (3) $\frac{7}{80}$ (4) $\frac{3}{80}$

120. $4 \cos \theta \sin^3 \theta - 4 \sin \theta \cos^3 \theta =$

- (1) 0 (2) 1 (3) $\sin 4\theta$ (4) $-\sin 4\theta$

121. A pole subtends angles 30° , 45° , 60° respectively at points A, B and C all lying on a horizontal line through the foot of the pole. Then $\frac{AB}{BC} =$

ఒక స్తంభం దాని పాదం గుండా పోయే ఒక క్షితిజ రేఖపైని బిందువులు A, B, C ల వద్ద వరసగా 30° , 45° , 60° కోణాలనేర్పరుస్తున్నది. అప్పుడు $\frac{AB}{BC} =$

- (1) $\frac{1}{\sqrt{3}}$ (2) $\sqrt{3} + 1$ (3) $\sqrt{3}$ (4) $\sqrt{3} - 1$

122. $x^4 - 4x^3 + 6x^2 - 4x + 1 = 0$ ($x \neq 0$)

$$\Rightarrow x + \frac{1}{x} =$$

- (1) $\frac{1}{2}$ (2) 2 (3) $\frac{5}{2}$ (4) $\frac{3}{2}$

123. If $x - 7$ is a factor of the polynomial $f(x)$, then a factor of $f(2x^2 - 1)$ among the following is

బహుపది $f(x)$ కు $x - 7$ ఒక కారణాంకమైతే క్రింది వాటిలో $f(2x^2 - 1)$ కు ఒక కారణాంకం

- (1) $x - 1$ (2) $x - 2$ (3) $x + 1$ (4) $x + 2$

124. The remainder obtained when $1! + 2! + 3! + \dots + (2014)!$ is divided by 7 is

$1! + 2! + 3! + \dots + (2014)!$ ను 7 చే భాగించగా వచ్చు శేషం

- (1) 3 (2) 4 (3) 5 (4) 6

125. $\sqrt{(x+1)(x+2)(x+3)(x+4)+1} =$

- (1) $\pm(x^2 + 5x + 4)$ (2) $\pm(x^2 + 5x + 5)$
(3) $\pm(x^2 + 5x + 6)$ (4) $\pm(x^2 + 6x + 5)$

A

126. The sum of seven consecutive even integers is s . Then, in terms of s , the greatest of these integers is
 ఏడు పరుస సరి పూర్ణాంకాల మొత్తం s . s పదాల్లో వీటిలోని గరిష్ఠ పూర్ణాంకం
- (1) $\frac{s+20}{5}$ (2) $\frac{s+72}{9}$ (3) $\frac{s+42}{7}$ (4) $\frac{s+30}{6}$
127. The maximum value of the expression $2 + 8x - x^2$ is
 సమాసం $2 + 8x - x^2$ యొక్క గరిష్ఠ విలువ
- (1) 16 (2) 17 (3) 18 (4) 19
128. $\frac{b}{a} = \frac{c}{b} = \frac{d}{c} \Rightarrow (a-c)^2 + (c-b)^2 + (b-d)^2 - (d-a)^2 =$
 (1) 1 (2) 0 (3) -1 (4) 2
129. The sum of first fifty odd natural numbers is
 మొదటి యాభై బేసి సహజ సంఖ్యల మొత్తం
- (1) 2500 (2) 625 (3) 10000 (4) 1600
130. The coefficient of x^3 in the expansion of $\left(x^2 - \frac{1}{x^3}\right)^9$ is
 $\left(x^2 - \frac{1}{x^3}\right)^9$ యొక్క విస్తరణలో x^3 యొక్క గుణకం
- (1) 9C_3 (2) $-{}^9C_3$ (3) 9C_5 (4) $-{}^9C_4$
131. The coefficient of middle term in the expansion of $(1+x)^{40}$ is
 $(1+x)^{40}$ యొక్క విస్తరణలో మధ్య పదం యొక్క గుణకం
- (1) $\frac{1.3.5 \dots 39}{20!} 2^{20}$ (2) $\frac{1.3.5 \dots 39}{20!}$
 (3) $\frac{21.22 \dots 40}{20!}$ (4) $40! 2^{20}$
132. $\begin{bmatrix} 2 & 16 \\ -8 & 0 \end{bmatrix} = \begin{bmatrix} a & b^2 \\ c^3 & 0 \end{bmatrix}$, $c < 0$, $b < 0$
 $\Rightarrow 3a + b + c =$
- (1) 2 (2) -2 (3) 4 (4) 0
133. If A, B are two matrices such that $AB = A$, $BA = B$, then $A^2 + B^2 =$
 రెండు మాత్రికలు A, B లు $AB = A$, $BA = B$ అయ్యేట్లుంటే $A^2 + B^2 =$
- (1) $A + B$ (2) $A - B$ (3) $2A + B$ (4) $A + 2B$
134. $\lim_{x \rightarrow 0} \frac{\tan x}{x^0} =$
- (1) $\frac{180}{\pi}$ (2) $\frac{\pi}{180}$ (3) 1 (4) -1

15RW-13

A

135. $x = \sqrt{x+y} \Rightarrow \frac{dy}{dx} =$

- (1) $1-x$ (2) $1+x$
 (3) $1-2x$ (4) $2x-1$

136. In a ΔABC , D, E, F are the mid points of the sides AB, BC and CA respectively. If AB = 8 cm, BC = 15 cm and AC = 12 cm, then DE + EF + FD =

ΔABC లోని భుజాల AB, BC, CA ల మధ్య బిందువులు వరసగా D, E, F లు. AB = 8 సెం.మీ.
 BC = 15 సెం.మీ., AC = 12 సెం.మీ. అయినప్పుడు DE + EF + FD =

- (1) 16.5 cm (2) 17.5 cm
 16.5 సెం.మీ. 17.5 సెం.మీ.
 (3) 25 cm (4) 35 cm
 25 సెం.మీ. 35 సెం.మీ.

137. A, B, C are three points on the circumference of a circle with centre O. If, in ΔABC , $\angle B = 60^\circ$ and $\angle C = 70^\circ$, then $\angle BOC =$

కేంద్రం O గా కల్గిన ఒక వృత్త పరిధిపై A, B, C లు మూడు బిందువులు. ΔABC లో $\angle B = 60^\circ$,
 $\angle C = 70^\circ$, అయితే $\angle BOC =$

- (1) 100° (2) 120° (3) 90° (4) 80°

138. If P, Q, R, S are the mid points of the sides of a quadrilateral ABCD, then the quadrilateral PQRS is a

ఒక చతుర్భుజం ABCD లోని భుజాల మధ్య బిందువులు P, Q, R, S అయితే చతుర్భుజం PQRS
 అనేది ఒక

- (1) Square (2) Parallelogram
 చతురస్రం సమాంతర చతుర్భుజం
 (3) Rectangle (4) Rhombus
 దీర్ఘచతురస్రం సమచతుర్భుజం

139. The points A(3, -5) and B(-5, 4) are given. If C is a point such that $\frac{AC}{CB} = 2$, then the coordinates of C are

బిందువులు A(3, -5), B(-5, 4) లు ఇవ్వబడినవి. C అనే బిందువు $\frac{AC}{CB} = 2$ అయ్యేట్లుంటే C నిరూపకాలు

- (1) $\left(\frac{7}{3}, 1\right)$ (2) $\left(\frac{-7}{3}, 1\right)$ (3) $\left(\frac{7}{3}, -1\right)$ (4) $\left(\frac{-7}{3}, -1\right)$

140. A (4, 2), B (6, 5) and C (1, 4) are the vertices of a ΔABC . The median from A meets the side BC at D. Then $2AD^2 =$

A(4, 2), B(6, 5), C(1, 4) లు ఒక త్రిభుజం ABC యొక్క శీర్షాలు. A నుంచి మధ్యగత రేఖ భుజం
 BC ను D వద్ద కలుస్తున్నది. అప్పుడు $2AD^2 =$

- (1) 13 (2) 14 (3) 15 (4) 16

A**15RW-13**

(iii) **Statistical Ability**
సాంఖ్యిక సామర్థ్యత

(Marks : 10)

141. The mean of the distribution given below is
క్రింది విభజనకు మధ్యమం

x	10-20	20-30	30-40	40-50
Frequency పొనఘన్యం	5	10	7	8

- (1) 30 (2) 31
(3) 32 (4) 33

142. For a given data, if the mean is 60 and the mode is 66, then the median is
ఇచ్చిన ఒక దత్తాంశానికి మధ్యమం 60, బాహుళకం 66, అయితే మధ్యగతం

- (1) 63 (2) 64
(3) 60 (4) 62

143. The mode of the following data is
క్రింది దత్తాంశానికి బాహుళకం

6, 9, 13, 10, 16, 13, 13, 14, 15, 11, 13, 12, 14

- (1) 11 (2) 12
(3) 13 (4) 14

144. If σ is the standard deviation of $x_1, x_2 \dots x_n$, then the standard deviation of $9 + 3x_1, 9 + 3x_2, \dots, 9 + 3x_n$ is

$x_1, x_2 \dots x_n$ ల క్రమవిచలనం σ అయితే, $9 + 3x_1, 9 + 3x_2, \dots, 9 + 3x_n$ ల క్రమవిచలనం

- (1) $3\sigma - 3$ (2) $\sqrt{9\sigma^2 + 3}$
(3) 3σ (4) $3\sigma + 9$

145. The variance of first n even natural numbers is
మొదటి n సహజ సంఖ్యల వస్తుతె

- (1) $\frac{n^2 - 1}{3}$ (2) $\frac{n^2 - 1}{6}$
(3) $\frac{n^2 - 1}{12}$ (4) $\frac{n^2 + 1}{3}$

146. The mean of first n odd natural numbers is
మొదటి n బేసి సహజ సంఖ్యల మధ్యమం

- (1) $n - 1$ (2) $n + 1$
(3) $n + 2$ (4) n

15RW-13

A

147. A number is selected at random from the first 80 natural numbers. The probability that it is divisible by 4 or 6 is

మొదటి 80 సహజ సంఖ్యల నుండి యాదృచ్ఛికంగా ఒక సంఖ్యను ఎన్నుకొనిరి. ఆ సంఖ్య 4 చే లేదా 6 చే నిశ్శేషంగా భాగింపబడుటకు సంభావ్యత

- (1) $\frac{23}{80}$ (2) $\frac{29}{80}$
 (3) $\frac{27}{80}$ (4) $\frac{33}{80}$

148. Two fair dice are rolled. The probability that the sum of the numbers on the faces shown is 8 is

రెండు నిష్పాక్షిక పాచికలను దొర్లించిరి. వాటిపైని కనిపించే సంఖ్యల మొత్తం 8 కావడానికి సంభావ్యత

- (1) $\frac{5}{36}$ (2) $\frac{1}{6}$
 (3) $\frac{7}{36}$ (4) $\frac{1}{9}$

149. The probability that either of the events A and B to happen is 0.6 and the probability that both of them to happen is 0.2. Then $P(A') + P(B') =$

(Here A' is the complementary event of A.)

ఘటనలు A, B లలో ఏదేని ఒకటి సంభవించుటకు సంభావ్యత 0.6, రెండూ సంభవించుటకు సంభావ్యత 0.2. అప్పుడు $P(A') + P(B') =$

(ఇక్కడ A' అనేది ఘటన A కి పూరకం)

- (1) 0.4 (2) 0.75
 (3) 0.8 (4) 1.2

150. Suppose $f(x) = (x - 2)(x - 5)(x - 7)$.

If a number α is chosen from $\{1, 3, 4, 5, 6, 7, 8, 9, 10\}$ randomly, the probability that it satisfies the equation $f(\alpha) = 0$, is

$f(x) = (x - 2)(x - 5)(x - 7)$ అనుకోండి.

$\{1, 3, 4, 5, 6, 7, 8, 9, 10\}$ నుండి ఒక సంఖ్య α ను యాదృచ్ఛికంగా ఎన్నుకుంటే అది $f(\alpha) = 0$ ను తృప్తిపరిచే విధంగా ఉండే సంభావ్యత

- (1) $\frac{1}{3}$ (2) $\frac{2}{5}$
 (3) $\frac{3}{7}$ (4) $\frac{2}{9}$

A

15RW-13

SECTION – C
Communication Ability

Questions : 50

Marks : 50

PART – 1

Choose the correct meaning for the word given :

151. radical

- | | |
|---------------|----------|
| (1) extreme | (2) red |
| (3) colourful | (4) slow |

152. tether

- | | |
|--------------|--------------|
| (1) teeth | (2) together |
| (3) restrain | (4) free |

153. synergy

- | | |
|-------------------|------------------------|
| (1) combined size | (2) joined effort |
| (3) related parts | (4) organized finances |

154. pervade

- | | |
|--------------------|--------------|
| (1) conquer | (2) escape |
| (3) spread through | (4) convince |

155. nascent

- | | |
|------------|---------------|
| (1) smelly | (2) fragrant |
| (3) immune | (4) incipient |

156. vacuous

- | | |
|-----------------|--------------------|
| (1) abandon | (2) vacate |
| (3) unavailable | (4) expressionless |

Fill in the blank choosing the correct word :

157. The rains _____ the fields, washing away the crops.

- | | |
|-------------|---------------|
| (1) stormed | (2) inundated |
| (3) blew | (4) covered |

158. Due to the ongoing controversy the political situation in the state is _____.

- | | |
|---------------|-------------|
| (1) upbeat | (2) cosy |
| (3) turbulent | (4) sublime |

159. England was a great _____ power in the nineteenth century.

- | | |
|----------------|----------|
| (1) merchant | (2) army |
| (3) mercantile | (4) navy |

160. The _____ mule would not pull the farmer's plow.

- | | |
|------------|--------------|
| (1) rigid | (2) sturdy |
| (3) rugged | (4) stubborn |

15RW-13



PART - 2

Choose the correct answer :

161. The process of reviewing the performance of employees periodically is called
(1) performance management (2) employee review
(3) performance appraisal (4) employee confidential report
162. The interview conducted in a situation not quite pleasant or comfortable to the candidate is called
(1) unstructured interview (2) depth interview
(3) stress interview (4) distress interview
163. The medium of outdoor poster in which printed ad message is displayed is called
(1) cutouts (2) POP
(3) exhibit (4) bill board
164. A market which is dominated by a few suppliers is known as
(1) perfect market (2) buyer's market
(3) oligopoly market (4) monopolist market
165. PERT is
(1) Programme Evaluation and Review Technique
(2) Programme Education and Review Teaching
(3) Programme Enlightenment and Review Technique
(4) Progress Evaluation and Review Timing
166. Which of the following is used for modulation and demodulation ?
(1) Modem (2) Protocols
(3) Gateway (4) Multiplexer
167. Linkage between CPU and users is provided by
(1) storage (2) control unit
(3) peripheral devices (4) software
168. In a computer system, which device is functionally opposite of a keyboard ?
(1) mouse (2) track ball
(3) printer (4) pen drive
169. The first mechanical computer designed by Charles Babbage was called
(1) Abacus (2) Processor
(3) Calculator (4) Analytical Engine
170. Which of the following is an example of non-volatile memory ?
(1) ROM (2) VLSI
(3) LSI (4) RAM

A

PART - 3

Choose the correct answer :

171. A : "There, that's what you looked like when you were a month old."
B : "How awful!"
In this conversation 'B'
(1) is pleased (2) is disappointed
(3) is unhappy (4) thinks he looked ugly
172. A : "Could I borrow some money from you ?"
B : "What do you need it for ?"
The conversation implies that 'B'
(1) is dodging the issue (2) is angry
(3) does not want to give money (4) wants to know why 'A' needs money
173. "It was a knockout. Umesh saw stars in his eyes."
The speaker implies that Umesh.
(1) is exuberant (2) is romantic
(3) is dreaming (4) has fallen unconscious
174. The active form of the sentence 'e-mails have been written by her' is
(1) she has written e-mails (2) she had written e-mails
(3) write e-mails to her (4) she sent e-mails
175. A : "I've got a new job!"
B : "Great ! that should open doors for you."
'B' implies that
(1) 'A' can get more opportunities. (2) The job will be done outdoors.
(3) The job will fetch a lot of money. (4) 'A' will be able to work well.
176. A : "There is a lot of disunity among the people."
B : I agree. Unity is the crying need of the hour."
'B' implies that
(1) there is no need for unity among the people.
(2) there is an urgent need for unity among the people.
(3) a plan may be made for achieving unity.
(4) unity may be achieved by crying for it, hour by hour.
177. A : "I want to train myself in yoga practices."
B : "I want to follow suit."
'B' implies
(1) that he would put on a suit.
(2) that he would follow anyone wearing a suit.
(3) that he would imitate 'A'.
(4) that it does not suit his temperament to follow anyone.

Fill in the blanks with the appropriate phrase/verb/preposition :

178. Manish had a poor salary but he didn't need much to _____
(1) live up (2) live on (3) live after (4) live in
179. Anthony _____ his wife to tell her that he would reach home late.
(1) called up (2) called on (3) called at (4) called away
180. He has to _____ with the eccentricity of his boss.
(1) put on (2) put up (3) put away (4) put in

15RW-13

A

181. Great people achieve what the others only dream _____.
 (1) by (2) of (3) with (4) out
182. She saved the child _____ drowning.
 (1) off (2) from (3) for (4) through
183. She'll be fearful _____ that.
 (1) on (2) of (3) with (4) to
184. Being very tired _____ studying.
 (1) impinges (2) impeaches (3) inhibits (4) inculcates
185. They _____ cultivating the land for twenty years when they moved to the city.
 (1) had been (2) are (3) is (4) have been

PART-4

Read the following passage and answer questions 186-190 :

After two decades of growing student enrollments and economic prosperity, business schools in the USA have started to face harder times. Only Havard's MBA school has shown a substantial increase in enrollment in recent years. Both Princeton and Stanford have seen decreases in their enrollments. Since 1990, the number of people receiving MBA degrees has dropped about 3 percent to 75,000 and the trend of lower enrollment rate is expected to continue.

There are two factors causing this decrease in students seeking MBA degree. The first one is that many graduates of four year colleges are finding that an MBA degree does not guarantee a plush job on Wall Street or in other financial districts of major American cities. Many of the entry level management jobs are going to students graduating with Master of Arts degrees in English and the humanities as well as those holding MBA degrees. Students have asked the question, "Is an MBA degree really what I need to be best prepared for getting a good job ?" The second major factor has been the cutting of American payrolls and the lower number of entry-level jobs being offered. Business needs are changing, and MBA schools are struggling to meet the new demands.

186. Which of the following business schools has not shown a decrease in enrollment ?
 (1) Princeton (2) Harvard (3) Stanford (4) Yale
187. What is the duration of an MBA degree ?
 (1) 4 years (2) 3 years
 (3) 2 years (4) not mentioned in the text
188. What are the two causes of declining business school enrollments ?
 (1) Lack of necessity for an MBA and an economic recession.
 (2) Low salary and foreign competition.
 (3) Declining population and low education standard.
 (4) Fewer MBA schools and higher tuition fees.
189. Which are the degrees preferred along with MBA for entry-level management jobs ?
 (1) Post Graduation in Linguistics
 (2) Graduation in humanities
 (3) Masters programme in Arts and Literature
 (4) Master in English and Humanities
190. What should be done by business schools to change the situation ?
 (1) Charge lower fee
 (2) Examine the changing needs of business
 (3) Change the curriculum
 (4) Improve placement procedure

A

Read the following passage and answer questions 191-195 :

More businesses are addressing social issues through philanthropy. Companies donate a portion of their revenues to charities or a specific social cause. Education is known to be the favourite object for philanthropy in which 75 percent of companies are participating. Although the donations will help a good cause, many companies use philanthropy primarily to improve their reputation or get a tax deduction. Philanthropy is not limited to the mature markets in the West. In emerging markets philanthropy is even more popular. Asia's millionaires committed 12 percent of their wealth for social causes. While millionaires in North America only contribute 8 percent and those in Europe 5 percent.

Although philanthropy helps society, we should never over estimate its socio-cultural impact. Recent growth in philanthropy is driven by the changes in the society. Even in a recession, 75 percent of Americans still donate to a social cause.

But philanthropy does not stimulate transformation in the society. Transformation in the society drives philanthropy. That is why addressing social issues with philanthropic activities will have a rather short-term impact.

A more advanced form of addressing social challenges is cause marketing – a practice where companies support a specific cause through their marketing activities.

- 191. Why do companies set aside money in their budget for charities ?**
- (1) It helps to reduce their tax liabilities.
 - (2) People want to help others.
 - (3) Companies do not want to attract attention.
 - (4) It makes people in the company happy.
- 192. What is the change that is coming about now ?**
- (1) Marketing has become easier.
 - (2) Companies have started earning more.
 - (3) There are more advertising companies.
 - (4) There is a growth in social awareness.
- 193. What is the most favourite area for donations from companies ?**
- | | |
|-------------------|----------------------|
| (1) Healthcare | (2) Education |
| (3) Social Ethics | (4) Public Relations |
- 194. What according to the author, will have only a limited impact on the transformation of society ?**
- | | |
|------------------|--------------------------|
| (1) Philanthropy | (2) Social change |
| (3) Recession | (4) Marketing strategies |
- 195. What is the main idea of this passage ?**
- (1) Philanthropy focuses only on education.
 - (2) Western countries spend more than others on philanthropy.
 - (3) Cause Marketing is a better form of marketing.
 - (4) Companies donate some part of their income to charities.

15RW-13

A

Read the following passage and answer questions 196-200 :

To many people growing old seems like the end game in chess : life winding down in a series of small moves with lesser pieces. As I age, I have discovered this is not true. I am not an elderly king stripped of my powers, reduced to a ragtail army of pawns. My life is not a defensive struggle of restricted options. Growing old is a game of verve and imagination and excitement. The outcome is not now a matter of strength, although that still remains, but of faith and courage, hope and wisdom. The aging game is a sport for which childhood and youth and maturity are no more than a preparation. Its scope comes a surprise. It expands my life at a time when I expected it to diminish. It demands an excellence that no longer seemed necessary. It asks me to surpass what I did at the peak of my powers. Age will not accept second best. In the aging game I must be all ever I was and am yet to be. What has gone before is no more than a learning period. A breaking in. Age is the combat for which I was trained. Now I must take this person I have become and make each new day special. I must make good on the promise of every dawn I am privileged to see. Life goes from a minor to a major key. The game builds to a climax. Every move assumes importance. One feels like a virtuoso, the gifts we have been given, the powers that empower us, the marvels that make us marvellous, are evident as never before. The truth is that we have lost nothing. The problem is not that I am less than I was when young, it is that I am not more. It is past time to become my own person.

196. What does growing old mean to many people ?
- | | |
|-------------------------------|-------------------------|
| (1) the end of the challenges | (2) mental degeneration |
| (3) lack of activity | (4) boredom |
197. What does aging mean to the author ?
- | | |
|--------------------|---------------------|
| (1) to be negative | (2) to be positive |
| (3) to laze around | (4) to be depressed |
198. What should aging lead to ?
- | | |
|----------------|----------------------------|
| (1) perfection | (2) death |
| (3) illness | (4) a marvellous existence |
199. Why is the 'aging game' referred to as a 'sport' ?
- (1) Old people play games.
 - (2) Old age makes one young in spirit.
 - (3) Problems of old age have to be overcome.
 - (4) It is a game in which one loses or wins.
200. What does childhood and maturity prepare are for ?
- (1) aging
 - (2) to face old age with hope and wisdom
 - (3) to rest in old age
 - (4) to be prepared for illness in old age