2017 (S) Roll No: _____

INTERMEDIATE PART-II (12th CLASS)

MATHEMATICS PAPER-II TIME ALLOWED: 2.30 Hours

SUBJECTIVE MAXIMUM MARKS: 80

NOTE: - Write same question number and its part number on answer book, as given in the question paper.

SECTION-I

2. Attempt any eight parts. **8 × 2 = 16**

(i) Express the area "A" of a circle as a function of its circumference "C".

(ii) Find $fog(x)$ if $f(x) = 2x + 1$, $g(x) = \frac{3}{x-1}$

(iii) Evaluate $\lim_{x \to 0} \frac{\sin ax}{\sin bx}$.

(iv) Find the derivative of the function $f(x) = c$ by definition.

(v) Differentiate w.r.t. 'x' $(x-5)(3-x)$

(vi) Find $\frac{dy}{dx}$ if $y = \sinh^{-1}(ax + b)$

(vii) Find $f'(x)$ if $f(x) = \ell n\left(e^x + e^{-x}\right)$

(viii) Define increasing and decreasing functions.

(ix) Find $f'(x)$ if $f(x) = x\sqrt{\ell n\, x}$

(x) Find $\frac{dy}{dx}$ if $y = \ell n\,(9 - x^2)$

(xi) Find $\frac{dy}{dx}$ if $y = \sinh^{-1}\left(\frac{x}{2}\right)$

(xii) Find $\frac{dy}{dx}$ if $x = (\theta - \sin\theta)$, $y = a\cos\theta$

3. Attempt any eight parts. **8 × 2 = 16**

(i) Using differential find $\frac{dx}{dy}$ when $\frac{y}{x} - \ell nx = \ell nc$

(ii) Evaluate $\int \frac{1}{\sqrt{x^3}}\, dx$

(iii) Define differential equation.

(iv) Evaluate $\int \frac{\cot\sqrt{x}}{\sqrt{x}}\, dx$

(v) Evaluate $\int \frac{x+2}{\sqrt{x+3}}\, dx$

(vi) Evaluate $\int \tan^3 x \sec x\, dx$

(vii) Evaluate $\int_0^{\pi/2} \cos^3\theta\, d\theta$

(viii) Solve the differential equation $\frac{1}{x}\frac{dy}{dx} - 2y = 0 \qquad x \neq 0\ y > 0$

(ix) Find the area above the $x-$axis, bounded by the curve $y^2 = 3 - x$ from $x = -1$ to $x = 2$

(x) Evaluate $\int Tan^{-1} x\, dx$

(xi) Define objective function.

(xii) Define feasible region.

P.T.O.

4. Attempt any nine parts. **$9 \times 2 = 18$**

(i) Find h such that $A(-1, h,)$, $B(3, 2)$ and $C(7, 3)$ are collinear.

(ii) Find an equation of line through the points $(-2, 1)$ and $(6, -4)$.

(iii) Find an equation of the horizontal line through $(7, -9)$.

(iv) Find the distance from the point $P(6, -1)$ to the line $6x - 4y + 9 = 0$

(v) Find the angle from the line with slope $-\frac{7}{3}$ to the line with slope $\frac{5}{2}$

(vi) Find an equation of the circle with ends of a diameter at $(-3, 2)$ and $(5, -6)$

(vii) Find the focus and vertex of the parabola $x^2 = 5y$

(viii) Define the central conics.

(ix) Find an equation of the ellipse with foci $(\pm 3, 0)$ and minor axis of length 10.

(x) Define equal vectors.

(xi) Find the direction cosines for the vector $\underline{v} = 3\underline{i} - \underline{j} + 2\underline{k}$

(xii) Calculate the projection of $\underline{a}$ along $\underline{b}$ when $\underline{a} = \underline{i} - \underline{k}$, $\underline{b} = \underline{j} + \underline{k}$

(xiii) Find the value of $3\underline{j} \cdot \underline{k} \times \underline{i}$

SECTION-II

NOTE: - Attempt any three questions. **$3 \times 10 = 30$**

5.(a) Evaluate $\lim_{\theta \to 0} \dfrac{\tan\theta - \sin\theta}{\sin^3 \theta}$

(b) Differentiate w. r. t. x. $Sec^{-1}\left(\dfrac{x^2+1}{x^2-1}\right)$

6.(a) Evaluate the integral $\int \dfrac{ax}{\sqrt{a^2 - x^4}}\, dx.$

(b) Find an equation of the line through the intersection of the lines $x - y - 4 = 0$ and $7x + y + 20 = 0$ and parallel to line $6x + y - 14 = 0$

7. (a) Find the area between the curve $y = x(x-1)(x+1)$ and the $x-$axis.

(b) Graph the feasible region of the system of linear inequalities and find the corner points in each case.

$$2x + 3y \le 18$$
$$x + 4y \le 12$$
$$3x + y \le 12$$
$$x \ge 0, \quad y \ge 0$$

8. (a) Write an equation of the circle that passes through the points $A(4,5)$, $B(-4, -3)$, $C(8, -3)$.

(b) Find the angle between the vectors $\underline{u} = 2\underline{i} - \underline{j} + \underline{k}$ and $\underline{v} = -\underline{i} + \underline{j}$

9.(a) Find the centre, foci, eccentricity, vertices and equations of directrices of $\dfrac{x^2}{4} - \dfrac{y^2}{9} = 1$

(b) Find area of the parallelogram whose vertices are $P(0, 0, 0)$, $Q(-1, 2, 4)$, $R(2, -1, 4)$ and $S(1, 1, 8,)$.

Paper Code Number: 4191	2017 (S) INTERMEDIATE PART-II (12th CLASS)	Roll No: _____

MATHEMATICS PAPER-II TIME ALLOWED: 30 Minutes

OBJECTIVE MAXIMUM MARKS: 20

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) $2\,Cosh\,x =$ (A) $e^{x} + e^{-x}$ (B) $e^{x} - e^{-x}$ (C) $e^{2x} - e^{-2x}$ (D) $e^{2x} + e^{-2x}$

(2) $\underset{x \to 0}{Limit} \dfrac{e^{x} - 1}{x} =$ (A) 0 (B) 1 (C) e (D) ∞

(3) If $f(x) = a^{x}$, then $f'(x) =$ (A) $x\,a^{x-1}$ (B) a^{x} (C) $a^{x}\ell na$ (D) $a^{x}\ell n\,x$

(4) $\dfrac{d}{dx}\sqrt{x}$ at $x = a$ is:- (A) $\dfrac{1}{2\sqrt{a}}$ (B) $2\sqrt{a}$ (C) $\dfrac{1}{\sqrt{a}}$ (D) $-\dfrac{1}{2\sqrt{a}}$

(5) $\dfrac{d}{dx}\left(\dfrac{1}{Cosec\,x}\right) =$ (A) $\dfrac{d}{dx}(Sin\,x)$ (B) $\dfrac{d}{dx}(Sec\,x)$ (C) $\dfrac{d}{dx}(Cot\,x)$ (D) $\dfrac{d}{dx}(Cosec\,x\,Cot\,x)$

(6) $\dfrac{d}{dx}\left(e^{Tan\,x}\right) =$ (A) $e^{Tan\,x}$ (B) $e^{Tan\,x}\,Sec^{2}x$ (C) $e^{Tan\,x}\,\ell n\,Sec^{2}x$ (D) $e^{Tan\,x}\,\ell n\tan x$

(7) If $y = e^{-ax}$ then $\dfrac{dy}{dx} =$ (A) $a\,e^{-ax}$ (B) e^{-ax} (C) $a^{2}\,e^{-ax}$ (D) $-a\,e^{-ax}$

(8) $\int e^{Sin\,x}\,Cos\,x\,dx =$ (A) $e^{Sin\,x} + c$ (B) $\ell n\,Sin\,x + c$ (C) $\ell n\,Cos\,x + c$ (D) $e^{Cos\,x} + c$

(9) $\int a^{x^{2}}.\,x\,dx =$ (A) $\dfrac{a^{x^{2}}}{\ell na} + c$ (B) $\dfrac{a^{x^{2}}}{2\ell na} + c$ (C) $a^{x^{2}} + c$ (D) $\dfrac{a^{x^{2}}}{2} + c$

(10) $\int_{0}^{\pi/2} Cos\,x\,dx =$ (A) -1 (B) 0 (C) 1 (D) $\frac{1}{2}$

(11) $\int -\dfrac{1}{1+x^{2}}\,dx =$ (A) $\tan^{-1}x + c$ (B) $Cot^{-1}x + c$ (C) $Cos^{-1}x + c$ (D) $Sin^{-1}x + c$

(12) The slope of a line with inclination 90^{0} is:- (A) 0 (B) $\dfrac{1}{\sqrt{3}}$ (C) 1 (D) Undefined

(13) The distance of point (a, b) from $(0, 0)$ is:-

(A) $\sqrt{a-b}$ (B) $\sqrt{a+b}$ (C) $\sqrt{a^{2}+b^{2}}$ (D) $\sqrt{a^{2}-b^{2}}$

(14) The slope of line through the points $(-2, 4), (5, 11)$ is:- (A) 0 (B) 1 (C) 2 (D) 3

(15) Equation of line x-axis is:- (A) $x = 0$ (B) $y = 0$ (C) $x = a$ (D) $y = a$

(16) $(3, 2)$ is in the solution of inequality:-

(A) $x + y < 2$ (B) $3x + 5y > 7$ (C) $3x + 5y < 7$ (D) $3x - 7y > 3$

(17) The centre of the circle $(x-1)^{2} + (y+3)^{2} = 3$ is:-

(A) $(-1, -3)$ (B) $(-1, 3)$ (C) $(1, -3)$ (D) $(1, 3)$

(18) The line through the foci of hyperbola is called:-

(A) Major axis (B) Conjugate axis (C) Transverse axis (D) Minor axis

(19) _____ is a unit vector.

(A) $[1, 1, 0]$ (B) $[0, 1, 1]$ (C) $[1, 0, 1]$ (D) $[1, 0, 0]$

(20) If three vectors $\underline{a}, \underline{b}$ and $\underline{c}$ are coplanar then $\underline{a} \cdot \underline{b} \times \underline{c} =$ (A) -1 (B) 0 (C) 1 (D) 2

Paper Code Number: 4193	2017 (S) INTERMEDIATE PART-II (12th CLASS)	Roll No: _____

MATHEMATICS PAPER-II

TIME ALLOWED: 30 Minutes
MAXIMUM MARKS: 20

OBJECTIVE

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve question on this sheet of OBJECTIVE PAPER.

Q.No.1

(1) $(3, 2)$ is in the solution of inequality:-

(A) $x + y < 2$ (B) $3x + 5y > 7$ (C) $3x + 5y < 7$ (D) $3x - 7y > 3$

(2) The centre of the circle $(x-1)^2 + (y+3)^2 = 3$ is:-

(A) $(-1, -3)$ (B) $(-1, 3)$ (C) $(1, -3)$ (D) $(1, 3)$

(3) The line through the foci of hyperbola is called:-

(A) Major axis (B) Conjugate axis (C) Transverse axis (D) Minor axis

(4) _____ is a unit vector.

(A) $[1, 1, 0]$ (B) $[0, 1, 1]$ (C) $[1, 0, 1]$ (D) $[1, 0, 0]$

(5) If three vectors $\underline{a}$, $\underline{b}$ and c are coplanar then $\underline{a} \cdot \underline{b} \times \underline{c} =$ (A) -1 (B) 0 (C) 1 (D) 2

(6) $2\,Cosh\,x =$ (A) $e^x + e^{-x}$ (B) $e^x - e^{-x}$ (C) $e^{2x} - e^{-2x}$ (D) $e^{2x} + e^{-2x}$

(7) $\lim\limits_{x \to 0} \dfrac{e^x - 1}{x} =$ (A) 0 (B) 1 (C) e (D) ∞

(8) If $f(x) = a^x$, then $f'(x) =$ (A) $x\,a^{x-1}$ (B) a^x (C) $a^x \ell n a$ (D) $a^x \ell n x$

(9) $\dfrac{d}{dx}\sqrt{x}$ at $x = a$ is:- (A) $\dfrac{1}{2\sqrt{a}}$ (B) $2\sqrt{a}$ (C) $\dfrac{1}{\sqrt{a}}$ (D) $-\dfrac{1}{2\sqrt{a}}$

(10) $\dfrac{d}{dx}\left(\dfrac{1}{Cosec\,x}\right) =$ (A) $\dfrac{d}{dx}(Sin\,x)$ (B) $\dfrac{d}{dx}(Sec\,x)$ (C) $\dfrac{d}{dx}(Cot\,x)$ (D) $\dfrac{d}{dx}(Cosec\,x\,Cot\,x)$

(11) $\dfrac{d}{dx}\left(e^{Tan\,x}\right) =$ (A) $e^{Tan\,x}$ (B) $e^{Tan\,x}\,Sec^2 x$ (C) $e^{Tan\,x}\,\ell n\,Sec^2 x$ (D) $e^{Tan\,x}\,\ell n \tan x$

(12) If $y = e^{-ax}$ then $\dfrac{dy}{dx} =$ (A) $a\,e^{-ax}$ (B) e^{-ax} (C) $a^2\,e^{ax}$ (D) $-a\,e^{-ax}$

(13) $\int e^{Sin\,x}\,Cos\,x\,dx =$ (A) $e^{Sin\,x} + c$ (B) $\ell n\,Sin\,x + c$ (C) $\ell n\,Cos\,x + c$ (D) $e^{Cos\,x} + c$

(14) $\int a^{x^2} \cdot x\,dx =$ (A) $\dfrac{a^{x^2}}{\ell n a} + c$ (B) $\dfrac{a^{x^2}}{2\,\ell n a} + c$ (C) $a^{x^2} + c$ (D) $\dfrac{a^{x^2}}{2} + c$

(15) $\int_0^{\pi/2} Cos\,x\,dx =$ (A) -1 (B) 0 (C) 1 (D) $\frac{1}{2}$

(16) $\int -\dfrac{1}{1+x^2}\,dx =$ (A) $\tan^{-1} x + c$ (B) $Cot^{-1} x + c$ (C) $Cos^{-1} x + c$ (D) $Sin^{-1} x + c$

(17) The slope of a line with inclination 90^0 is:- (A) 0 (B) $\dfrac{1}{\sqrt{3}}$ (C) 1 (D) Undefined

(18) The distance of point (a, b) from $(0, 0)$ is:-

(A) $\sqrt{a-b}$ (B) $\sqrt{a+b}$ (C) $\sqrt{a^2+b^2}$ (D) $\sqrt{a^2-b^2}$

(19) The slope of line through the points $(-2, 4), (5, 11)$ is:- (A) 0 (B) 1 (C) 2 (D) 3

(20) Equation of line x-axis is:- (A) $x = 0$ (B) $y = 0$ (C) $x = a$ (D) $y = a$

Paper Code Number: 4195	2017 (S) INTERMEDIATE PART-II (12th CLASS)	Roll No: _____

MATHEMATICS PAPER-II

TIME ALLOWED: 30 Minutes

OBJECTIVE

MAXIMUM MARKS: 20

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Q.No.1

(1) $\int -\frac{1}{1+x^2}\,dx =$ (A) $\tan^{-1}x + c$ (B) $Cot^{-1}x + c$ (C) $Cos^{-1}x + c$ (D) $Sin^{-1}x + c$

(2) The slope of a line with inclination 90^0 is:- (A) 0 (B) $\frac{1}{\sqrt{3}}$ (C) 1 (D) Undefined

(3) The distance of point (a, b) from $(0, 0)$ is:-

(A) $\sqrt{a-b}$ (B) $\sqrt{a+b}$ (C) $\sqrt{a^2+b^2}$ (D) $\sqrt{a^2-b^2}$

(4) The slope of line through the points $(-2, 4), (5, 11)$ is:- (A) 0 (B) 1 (C) 2 (D) 3

(5) Equation of line x-axis is:- (A) $x = 0$ (B) $y = 0$ (C) $x = a$ (D) $y = a$

(6) $(3, 2)$ is in the solution of inequality:-

(A) $x + y < 2$ (B) $3x + 5y > 7$ (C) $3x + 5y < 7$ (D) $3x - 7y > 3$

(7) The centre of the circle $(x-1)^2 + (y+3)^2 = 3$ is:-

(A) $(-1, -3)$ (B) $(-1, 3)$ (C) $(1, -3)$ (D) $(1, 3)$

(8) The line through the foci of hyperbola is called:-

(A) Major axis (B) Conjugate axis (C) Transverse axis (D) Minor axis

(9) _____ is a unit vector.

(A) $[1, 1, 0]$ (B) $[0, 1, 1]$ (C) $[1, 0, 1]$ (D) $[1, 0, 0]$

(10) If three vectors $\underline{a}, \underline{b}$ and $\underline{c}$ are coplanar then $\underline{a} \cdot \underline{b} \times \underline{c} =$ (A) -1 (B) 0 (C) 1 (D) 2

(11) $2\,Cosh\,x =$ (A) $e^x + e^{-x}$ (B) $e^x - e^{-x}$ (C) $e^{2x} - e^{-2x}$ (D) $e^{2x} + e^{-2x}$

(12) $\underset{x \to 0}{Limit} \frac{e^x - 1}{x} =$ (A) 0 (B) 1 (C) e (D) ∞

(13) If $f(x) = a^x$, then $f'(x) =$ (A) $x\,a^{x-1}$ (B) a^x (C) $a^x \ell na$ (D) $a^x \ell n x$

(14) $\frac{d}{dx}\sqrt{x}$ at $x = a$ is:- (A) $\frac{1}{2\sqrt{a}}$ (B) $2\sqrt{a}$ (C) $\frac{1}{\sqrt{a}}$ (D) $-\frac{1}{2\sqrt{a}}$

(15) $\frac{d}{dx}\left(\frac{1}{Cosec\,x}\right) =$ (A) $\frac{d}{dx}(Sin\,x)$ (B) $\frac{d}{dx}(Sec\,x)$ (C) $\frac{d}{dx}(Cot\,x)$ (D) $\frac{d}{dx}(Cosec\,x\,Cot\,x)$

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(17) If $y = e^{-ax}$ then $\frac{dy}{dx} =$ (A) $a\,e^{-ax}$ (B) e^{ax} (C) $a^2\,e^{-ax}$ (D) $-ae^{-ax}$

(18) $\int e^{Sin\,x}\,Cos\,x\,dx =$ (A) $e^{Sin\,x} + c$ (B) $\ell n Sin\,x + c$ (C) $\ell n\,Cos\,x + c$ (D) $e^{Cos\,x} + c$

(19) $\int a^{x^2}\,.\,x\,dx =$ (A) $\frac{a^{x^2}}{\ell na} + c$ (B) $\frac{a^{x^2}}{2\,\ell na} + c$ (C) $a^{x^2} + c$ (D) $\frac{a^{x^2}}{2} + c$

(20) $\int_0^{\pi/2} Cos\,x\,dx =$ (A) -1 (B) 0 (C) 1 (D) $\frac{1}{2}$

Paper Code Number: 4197	2017 (S) INTERMEDIATE PART-II (12th CLASS)	Roll No: _____

MATHEMATICS PAPER-II TIME ALLOWED: 30 Minutes

OBJECTIVE MAXIMUM MARKS: 20

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Q.No.1

(1) $\frac{d}{dx}\left(e^{\tan x}\right)=$ (A) $e^{\tan x}$ (B) $e^{\tan x}\,Sec^2 x$ (C) $e^{\tan x}\,\ell n\,Sec^2 x$ (D) $e^{\tan x}\,\ell n\tan x$

(2) If $y = e^{-ax}$ then $\frac{dy}{dx}=$ (A) $a\,e^{-ax}$ (B) e^{-ax} (C) $a^2\,e^{-ax}$ (D) $-ae^{-ax}$

(3) $\int e^{\sin x}\,Cos x\,dx=$ (A) $e^{\sin x}+c$ (B) $\ell n\,Sin x+c$ (C) $\ell n\,Cos x+c$ (D) $e^{Cos x}+c$

(4) $\int a^{x^2}.x\,dx=$ (A) $\frac{a^{x^2}}{\ell na}+c$ (B) $\frac{a^{x^2}}{2\ell na}+c$ (C) $a^{x^2}+c$ (D) $\frac{a^{x^2}}{2}+c$

(5) $\int_0^{\pi/2} Cos x\,dx=$ (A) -1 (B) 0 (C) 1 (D) $1/2$

(6) $\int -\frac{1}{1+x^2}\,dx=$ (A) $\tan^{-1}x+c$ (B) $Cot^{-1}x+c$ (C) $Cos^{-1}x+c$ (D) $Sin^{-1}x+c$

(7) The slope of a line with inclination 90^0 is:- (A) 0 (B) $\frac{1}{\sqrt{3}}$ (C) 1 (D) Undefined

(8) The distance of point $(a\,,b)$ from $(0\,,0)$ is:-

(A) $\sqrt{a-b}$ (B) $\sqrt{a+b}$ (C) $\sqrt{a^2+b^2}$ (D) $\sqrt{a^2-b^2}$

(9) The slope of line through the points $(-2\,,4),(5\,,11)$ is:- (A) 0 (B) 1 (C) 2 (D) 3

(10) Equation of line to x-axis is:- (A) $x=0$ (B) $y=0$ (C) $x=a$ (D) $y=a$

(11) $(3\,,2)$ is in the solution of inequality:-

(A) $x+y<2$ (B) $3x+5y>7$ (C) $3x+5y<7$ (D) $3x-7y>3$

(12) The centre of the circle $(x-1)^2+(y+3)^2=3$ is:-

(A) $(-1\,,-3)$ (B) $(-1\,,3)$ (C) $(1\,,-3)$ (D) $(1\,,3)$

(13) The line through the foci of hyperbola is called:-

(A) Major axis (B) Conjugate axis (C) Transverse axis (D) Minor axis

(14) _____ is a unit vector.

(A) $[1,1,0]$ (B) $[0,1,1]$ (C) $[1,0,1]$ (D) $[1,0,0]$

(15) If three vectors $\underline{a}\,,\underline{b}$ and $\underline{c}$ are coplanar then $\underline{a}.\underline{b}\times\underline{c}=$ (A) -1 (B) 0 (C) 1 (D) 2

(16) $2\,Cosh\,x=$ (A) e^x+e^{-x} (B) e^x-e^{-x} (C) $e^{2x}-e^{-2x}$ (D) $e^{2x}+e^{-2x}$

(17) $\underset{x\to 0}{Limit}\ \frac{e^x-1}{x}=$ (A) 0 (B) 1 (C) e (D) ∞

(18) If $f(x)=a^x$, then $f'(x)=$ (A) $x\,a^{x-1}$ (B) a^x (C) $a^x\ell na$ (D) $a^x\ell nx$

(19) $\frac{d}{dx}\sqrt{x}$ at $x=a$ is:- (A) $\frac{1}{2\sqrt{a}}$ (B) $2\sqrt{a}$ (C) $\frac{1}{\sqrt{a}}$ (D) $-\frac{1}{2\sqrt{a}}$

(20) $\frac{d}{dx}\left(\frac{1}{Cosec\,x}\right)=$ (A) $\frac{d}{dx}(Sin x)$ (B) $\frac{d}{dx}(Sec x)$ (C) $\frac{d}{dx}(Cot x)$ (D) $\frac{d}{dx}(Cosec\,x\,Cot x)$

BOARD OF INTERMEDIATE AND SECONDARY EDUCATION, MULTAN

OBJECTIVE KEY FOR INTER (PART-~~I~~/II) Examination, 2017.

Name of Subject MATH   Session 2015 — 2017

Q. Nos.	Paper Code 4191	Paper Code 4193	Paper Code 4195	Paper Code 4197
1.	A	B	B	B
2.	B	C	D	D
3.	C	C	C	A
4.	A	D	B	B
5.	A	B	B	C
6.	B	A	B	B
7.	D	B	C	D
8.	A	C	C	C
9.	B	A	D	B
10.	C	A	B	B
11.	B	B	A	B
12.	D	D	B	C
13.	C	A	C	C
14.	B	B	A	D
15.	B	C	A	B
16.	B	B	B	A
17.	C	D	D	B
18.	C	C	A	C
19.	D	B	B	A
20.	B	B	C	A

سرٹیفیکیٹ بابت تصحیح سوالیہ پرچہ/ مارکنگ Key

ہم نے مضمون Math پرچہ II گروپ — سکیم New انٹر ~~حاضر~~ ضمنی امتحان 2017 کا سوالیہ پرچہ/ نشانیہ معروضی (Subjective & Objevtive) کو بنظر عمیق چیک کرلیا ہے یہ پرچہ سلیبس کے عین مطابق Set کیا گیا ہے۔ اس سوالیہ پرچہ میں کسی قسم کی کوئی غلطی نہ ہے۔ ہم نے سوالیہ پرچہ کا اردو اور انگریزی Version بھی چیک کرلیا ہے یہ Version آپس میں مطابقت رکھتے ہیں اور سلیبس (Syllabus) کے مطابق بھی ہیں۔ نیز اس پرچہ کی Key کی بابت بھی تصدیق کی جاتی ہے کہ یہ بھی درست بنائی گئی ہے۔ اس میں بھی کسی قسم کی کوئی غلطی نہ ہے۔

مزید یہ کہ ہم نے Key بنانے سے متعلق دفتر کی جانب سے تیار کردہ ہدایات وصول کر کے ان کا بغور مطالعہ کرلیا ہے اور ان کی روشنی میں Key بنائی ہے۔

PREPARED & CHECKED BY

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