

# Gujarat Technological University

## Diploma Engineering C to D Bridge Course Examination

Subject Code: C320003

Date: 8-06-2017

Subject Name: ADVANCED MATHEMATICS (GROUP -2)

Time: 10.30 AM TO 12.00PM

Total Marks: 70

### Instructions:

1. Attempt all questions.
2. Make suitable assumption wherever necessary.
3. Each question is of 1 mark.
4. Use of SIMPLE CALCULATOR is permissible. (Scientific/Higher Version not allowed)
5. English version is authentic.

No.	Question Text and Option. પ્રશ્ન અને વિકલ્પો.			
1.	Distance between the points (1, -2) and (2,3) is _____.			
	A.	$\sqrt{13}$	B.	$\sqrt{23}$
	C.	$\sqrt{3}$	D.	$\sqrt{26}$
૧.	બિંદુઓ (1, -2) અને (2,3) વચ્ચેનું અંતર _____ થાય.			
	A.	$\sqrt{13}$	B.	$\sqrt{23}$
	C.	$\sqrt{3}$	D.	$\sqrt{26}$
2.	The slope of the line passing through the points A(1, -1) and B(4,5) is _____.			
	A.	1	B.	2
	C.	-2	D.	3
૨.	બિંદુઓ A(1, -1) અને B(4,5) માંથી પસાર થતી રેખાનો ઢાળ _____ થાય.			
	A.	1	B.	2
	C.	-2	D.	3
3.	If lines $5x - ky = 4$ and $2x - 3y = 5$ are parallel then $k =$ _____.			
	A.	$\frac{-15}{2}$	B.	$\frac{15}{2}$
	C.	2	D.	3
૩.	જો રેખાઓ $5x - ky = 4$ અને $2x - 3y = 5$ સમાંતર હોય તો $k =$ _____.			
	A.	$\frac{-15}{2}$	B.	$\frac{15}{2}$
	C.	2	D.	3
4.	X-intercept of the line $2x + 3y = 4$ is _____.			
	A.	-2	B.	3
	C.	2	D.	4
૪.	રેખા $2x + 3y = 4$ માટે X-અંતઃખંડ _____ થાય.			
	A.	-2	B.	3
	C.	2	D.	4
5.	Equation of line passing through (3,4) and perpendicular to the line $2x - 3y = 1$ is _____.			
	A.	$3x + 2y = 17$	B.	$3x - 2y = 17$
	C.	$3x - 2y = -17$	D.	$3x + 2y = -17$
૫.	બિંદુ (3,4) માંથી પસાર થતી અને $2x - 3y = 1$ રેખાને લંબ રેખાનું સમીકરણ _____ થાય.			
	A.	$3x + 2y = 17$	B.	$3x - 2y = 17$
	C.	$3x - 2y = -17$	D.	$3x + 2y = -17$

6.	The point _____ is not on the line $x + y = 1$			
	A.	(0,1)	B.	(3,4)
	C.	(1,0)	D.	(-3,4)
૬.	નીચેનામાંથી બિંદુ _____ એ રેખા $x + y = 1$ પર નથી.			
	A.	(0,1)	B.	(3,4)
	C.	(1,0)	D.	(-3,4)
7.	The point _____ is on the circle $x^2 + (y - 1)^2 = 0$			
	A.	(0,1)	B.	(2,1)
	C.	(1,1)	D.	(1,3)
૭.	બિંદુ _____ એ વર્તુળ $x^2 + (y - 1)^2 = 0$ પર છે.			
	A.	(0,1)	B.	(2,1)
	C.	(1,1)	D.	(1,3)
8.	If $f(x) = 2^x + 3^x$ then $f(0) =$ _____.			
	A.	5	B.	0
	C.	1	D.	2
૮.	$f(x) = 2^x + 3^x$ માટે $f(0) =$ _____.			
	A.	5	B.	0
	C.	1	D.	2
9.	For $f(x) = \frac{x-1}{x+1}$ then $f\left(\frac{1}{x}\right) =$ _____.			
	A.	$f(x)$	B.	$-f(x)$
	C.	0	D.	1
૯.	$f(x) = \frac{x-1}{x+1}$ માટે $f\left(\frac{1}{x}\right) =$ _____.			
	A.	$f(x)$	B.	$-f(x)$
	C.	0	D.	1
10.	$\lim_{\theta \rightarrow 0} \frac{\tan 7\theta}{\theta} =$ _____.			
	A.	1/7	B.	1
	C.	0	D.	7
૧૦.	$\lim_{\theta \rightarrow 0} \frac{\tan 7\theta}{\theta} =$ _____.			
	A.	1/7	B.	1
	C.	0	D.	7
11.	If $f(x) = 4x^2 - 3x + 8$ then $f(1) =$ _____.			
	A.	8	B.	1
	C.	9	D.	0
૧૧.	$f(x) = 4x^2 - 3x + 8$ માટે $f(1) =$ _____.			
	A.	8	B.	1
	C.	9	D.	0
12.	$\lim_{x \rightarrow 1} \frac{x+7}{x+1} =$ _____.			
	A.	7	B.	1
	C.	4	D.	0
૧૨.	$\lim_{x \rightarrow 1} \frac{x+7}{x+1} =$ _____.			
	A.	7	B.	1
	C.	4	D.	0

13.	$\lim_{x \rightarrow 2} \frac{x^2 - 3x + 2}{x - 2} = \text{-----} .$			
	A.	0	B.	1
	C.	2	D.	3
१३.	$\lim_{x \rightarrow 2} \frac{x^2 - 3x + 2}{x - 2} = \text{-----}$			
	A.	0	B.	1
	C.	2	D.	3
14.	$\frac{d}{dx}(\log x) = \text{-----} .$			
	A.	$\frac{1}{x}$	B.	$-\frac{1}{x}$
	C.	$x$	D.	$-x$
१४.	$\frac{d}{dx}(\log x) = \text{-----} .$			
	A.	$\frac{1}{x}$	B.	$-\frac{1}{x}$
	C.	$x$	D.	$-x$
15.	For $y = \tan 45^\circ$ , $\frac{dy}{dx} = \text{-----} .$			
	A.	3	B.	2
	C.	1	D.	0
१५.	$y = \tan 45^\circ$ म्हणजे $\frac{dy}{dx} = \text{-----} .$			
	A.	3	B.	2
	C.	1	D.	0
16.	For $y = \cos x + 9$ , $\frac{d^2 y}{dx^2} = \text{-----} .$			
	A.	$y$	B.	$-y$
	C.	$\cos x$	D.	$-\cos x$
१६.	$y = \cos x + 9$ म्हणजे $\frac{d^2 y}{dx^2} = \text{-----} .$			
	A.	$y$	B.	$-y$
	C.	$\cos x$	D.	$-\cos x$
17.	$\frac{d}{dx}[\log(\sec x)] = \text{-----}$			
	A.	$\sec x$	B.	$\tan x$
	C.	$\frac{1}{\sec x}$	D.	$\cot x$
१७.	$\frac{d}{dx}[\log(\sec x)] = \text{-----}$			
	A.	$\sec x$	B.	$\tan x$
	C.	$\frac{1}{\sec x}$	D.	$\cot x$
18.	If $y = e^{\sin x}$ then $\frac{dy}{dx} = \text{-----} .$			
	A.	$e^{\sin x}$	B.	$e^{\sin x} \cos x$
	C.	$e^{\cos x}$	D.	$e^{\cos x} \cos x$
१८.	$y = e^{\sin x}$ म्हणजे $\frac{dy}{dx} = \text{-----} .$			

	A.	$e^{\sin x}$	B.	$e^{\sin x} \cos x$
	C.	$e^{\cos x}$	D.	$e^{\cos x} \cos x$
19.	If $y = x^2 \cos x$ then $\frac{dy}{dx} = \dots$ .			
	A.	$2x \cos x$	B.	$2x - \sin x$
	C.	$2x \cos x - x^2 \sin x$	D.	$2x \cos x - x^2 \sin x + c$
૧૯.	$y = x^2 \cos x$ માટે $\frac{dy}{dx} = \dots$ .			
	A.	$2x \cos x$	B.	$2x - \sin x$
	C.	$2x \cos x - x^2 \sin x$	D.	$2x \cos x - x^2 \sin x + c$
20.	$\frac{d}{dx}(e^x) = \dots$ .			
	A.	$e^x \log_e x$	B.	$e^x$
	C.	1	D.	0
૨૦.	$\frac{d}{dx}(e^x) = \dots$ .			
	A.	$e^x \log_e x$	B.	$e^x$
	C.	1	D.	0
21.	For $y = \sin \theta, x = \cos \theta, \frac{dy}{dx} = \dots$ .			
	A.	$\cot \theta$	B.	$\tan \theta$
	C.	$-\tan \theta$	D.	$-\cot \theta$
૨૧.	$y = \sin \theta, x = \cos \theta, \frac{dy}{dx} = \dots$ .			
	A.	$\cot \theta$	B.	$\tan \theta$
	C.	$-\tan \theta$	D.	$-\cot \theta$
22.	If $x^2 = 3xy + 9$ then $\frac{dy}{dx} = \dots$ .			
	A.	$\frac{3x - 2y}{3x}$	B.	$\frac{2x + 3y}{3x}$
	C.	$\frac{2x - 3y}{3x}$	D.	$\frac{2x - 3y}{x}$
૨૨.	જો $x^2 = 3xy + 9$ તો $\frac{dy}{dx} = \dots$ .			
	A.	$\frac{3x - 2y}{3x}$	B.	$\frac{2x + 3y}{3x}$
	C.	$\frac{2x - 3y}{3x}$	D.	$\frac{2x - 3y}{x}$
23.	$\int e^x dx = \dots$ .			
	A.	$e^{2x} + c$	B.	$e^x + c$
	C.	0	D.	$e^{x^2} + c$
૨૩.	$\int e^x dx = \dots$ .			
	A.	$e^{2x} + c$	B.	$e^x + c$
	C.	0	D.	$e^{x^2} + c$
24.	$\int (\operatorname{cosec}^2 x - \cot^2 x) dx = \dots$			
	A.	0	B.	1
	C.	$\operatorname{cosec} x + c$	D.	$x + c$

२४.	$\int (\operatorname{cosec}^2 x - \cot^2 x) dx = \text{-----}$			
	A.	0	B.	1
	C.	$\operatorname{cosec} x + c$	D.	$x + c$
25.	$\int \frac{f'(x)}{f(x)} dx = \text{-----}$			
	A.	$\log  f(x)  + c$	B.	$\log  f'(x)  + c$
	C.	$\log [f(x) + f'(x)] + c$	D.	$n [f(x)]^{n-1} + c$
२५.	$\int \frac{f'(x)}{f(x)} dx = \text{-----}$			
	A.	$\log  f(x)  + c$	B.	$\log  f'(x)  + c$
	C.	$\log [f(x) + f'(x)] + c$	D.	$n [f(x)]^{n-1} + c$
26.	$\int \frac{1}{x+7} dx = \text{-----}$			
	A.	$\log(x+7) + c$	B.	$\log(7x) + c$
	C.	$\frac{7}{\log(x+7)} + c$	D.	$\frac{1}{\log(x+7)} + c$
२६.	$\int \frac{1}{x+7} dx = \text{-----}$			
	A.	$\log(x+7) + c$	B.	$\log(7x) + c$
	C.	$\frac{7}{\log(x+7)} + c$	D.	$\frac{1}{\log(x+7)} + c$
27.	$\int (2x-1) d\theta = \text{-----} + c$			
	A.	$x^2 - 2x + c$	B.	$x^2 + 2x$
	C.	$(2x-1)\theta$	D.	$(2x-1)^2 \theta$
२७.	$\int (2x-1) d\theta = \text{-----} + c$			
	A.	$x^2 - 2x + c$	B.	$x^2 + 2x$
	C.	$(2x-1)\theta$	D.	$(2x-1)^2 \theta$
28.	$\int_0^1 e^{2x} dx = \text{-----}$			
	A.	0	B.	1
	C.	$\frac{e^2 - 1}{2}$	D.	$\frac{1 - e^2}{2}$
२८.	$\int_0^1 e^{2x} dx = \text{-----}$			
	A.	0	B.	1
	C.	$\frac{e^2 - 1}{2}$	D.	$\frac{1 - e^2}{2}$
29.	$\int \cot \theta d\theta = \text{-----} + c$			
	A.	$\log  \tan \theta $	B.	$\log  \sin \theta $
	C.	$\log  \sec \theta $	D.	$\log  \cos \theta $
२९.	$\int \cot \theta d\theta = \text{-----} + c$			
	A.	$\log  \tan \theta $	B.	$\log  \sin \theta $

	C.	$\log  \sec \theta $	D.	$\log  \cos \theta $
30.	$\int \sec^2 x dx = \underline{\hspace{2cm}}$ .			
	A.	$\tan^2 x + c$	B.	$\sec x \tan x + c$
	C.	$\sec x + c$	D.	$\tan x + c$
30.	$\int \sec^2 x dx = \underline{\hspace{2cm}}$ .			
	A.	$\tan^2 x + c$	B.	$\sec x \tan x + c$
	C.	$\sec x + c$	D.	$\tan x + c$
31.	Mean of observations 2,3,5,7,8 is $\underline{\hspace{2cm}}$ .			
	A.	5	B.	10
	C.	5.5	D.	6
31.	અવલોકનો 2,3,5,7,8 નો મધ્યક $\underline{\hspace{2cm}}$ છે.			
	A.	5	B.	10
	C.	5.5	D.	6
32.	Median of observations 10, 9, 2,3, 1, 5,7,8, 13 is $\underline{\hspace{2cm}}$ .			
	A.	7	B.	9
	C.	8	D.	10
32.	અવલોકનો 10, 9, 2,3, 1, 5,7,8, 13 નો મધ્યસ્થ $\underline{\hspace{2cm}}$ છે.			
	A.	7	B.	9
	C.	8	D.	10
33.	Mode of observations 7, 9, 7,5, 1, 5,7,8, 13 is $\underline{\hspace{2cm}}$ .			
	A.	5	B.	13
	C.	8	D.	7
33.	અવલોકનો 7, 9, 7,5, 1, 5,7,8, 13 નો બહુલક $\underline{\hspace{2cm}}$ છે.			
	A.	5	B.	13
	C.	8	D.	7
34.	Mean of first five natural number is $\underline{\hspace{2cm}}$ .			
	A.	5	B.	2
	C.	3	D.	1
34.	પ્રથમ પાંચ પ્રાકૃતિક સંખ્યાઓનો મધ્યક $\underline{\hspace{2cm}}$ છે.			
	A.	5	B.	2
	C.	3	D.	1
35.	Median of first ten natural number is $\underline{\hspace{2cm}}$ .			
	A.	5.5	B.	10
	C.	5	D.	6
34.	પ્રથમ દશ પ્રાકૃતિક સંખ્યાઓનો મધ્યસ્થ $\underline{\hspace{2cm}}$ છે.			
	A.	5.5	B.	10
	C.	5	D.	6
36.	If $f(x) = x^{10} + x^9 + 2$ then $f(-1) = \underline{\hspace{2cm}}$ .			
	A.	3	B.	0
	C.	2	D.	1
35.	$f(x) = x^{10} + x^9 + 2$ માટે $f(-1) = \underline{\hspace{2cm}}$ .			
	A.	3	B.	0
	C.	2	D.	1
37.	If $f(x) = \log_5 x$ then $f(5) = \underline{\hspace{2cm}}$ .			
	A.	5	B.	1
	C.	0	D.	10
39.	$f(x) = \log_5 x$ માટે $f(5) = \underline{\hspace{2cm}}$ .			

	A.	5	B.	1
	C.	0	D.	10
38.	$\lim_{n \rightarrow \infty} \frac{2 \sum n}{n^2} = \text{-----} .$			
	A.	1	B.	2
	C.	$\infty$	D.	0
38.	$\lim_{n \rightarrow \infty} \frac{2 \sum n}{n^2} = \text{-----} .$			
	A.	1	B.	2
	C.	$\infty$	D.	0
39.	If $f(x) = \log x$ then $f(xy) = \text{-----} .$			
	A.	$f(x)f(y)$	B.	$f(x) + f(y)$
	C.	$f(x)/f(y)$	D.	$f(x) - f(y)$
39.	$f(x) = \log x$ మరియు $f(xy) = \text{-----} .$			
	A.	$f(x)f(y)$	B.	$f(x) + f(y)$
	C.	$f(x)/f(y)$	D.	$f(x) - f(y)$
40.	$\lim_{x \rightarrow 0} \frac{3^x - 1}{x} = \text{-----} .$			
	A.	3	B.	$\log x$
	C.	1	D.	$\log 3$
40.	$\lim_{x \rightarrow 0} \frac{3^x - 1}{x} = \text{-----} .$			
	A.	3	B.	$\log x$
	C.	1	D.	$\log 3$
41.	$\lim_{x \rightarrow 1} \left( \frac{x^2 - x}{x - 1} \right) = \text{-----} .$			
	A.	0	B.	1
	C.	$x$	D.	-1
41.	$\lim_{x \rightarrow 1} \left( \frac{x^2 - x}{x - 1} \right) = \text{-----} .$			
	A.	0	B.	1
	C.	$x$	D.	-1
42.	If $y = xe^x$ then $\frac{dy}{dx} = \text{-----} .$			
	A.	$e^x(x+1)$	B.	$x(e^x + 1)$
	C.	$e^x(x-1)$	D.	$x(e^x - 1)$
42.	$y = xe^x$ మరియు $\frac{dy}{dx} = \text{-----} .$			
	A.	$e^x(x+1)$	B.	$x(e^x + 1)$
	C.	$e^x(x-1)$	D.	$x(e^x - 1)$
43.	$\frac{d}{dx}(\tan^{-1} x) = \text{-----} .$			
	A.	$\frac{-1}{1+x^2}$	B.	$\frac{-1}{1-x^2}$
	C.	$\frac{1}{1+x^2}$	D.	$\frac{1}{1-x^2}$

૪૩.	$\frac{d}{dx}(\tan^{-1} x) = \text{----}.$			
	A.	$\frac{-1}{1+x^2}$	B.	$\frac{-1}{1-x^2}$
	C.	$\frac{1}{1+x^2}$	D.	$\frac{1}{1-x^2}$
44.	If $y = x + 49$ then $\frac{dy}{dx} = \text{-----}.$			
	A.	1	B.	49
	C.	0	D.	-1
૪૪.	$y = x + 49$ માટે $\frac{dy}{dx} = \text{-----}.$			
	A.	1	B.	49
	C.	0	D.	-1
45.	$\frac{d^2}{dx^2}(e^{2x+5}) = \text{----}.$			
	A.	$2e^{2x+5}$	B.	$4e^{2x+5}$
	C.	$e^{2x+5}$	D.	$5e^{2x+5}$
૪૫.	$\frac{d^2}{dx^2}(e^{2x+5}) = \text{----}.$			
	A.	$2e^{2x+5}$	B.	$4e^{2x+5}$
	C.	$e^{2x+5}$	D.	$5e^{2x+5}$
46.	$y = \frac{x+2}{x}$ then $\frac{dy}{dx} = \text{-----}.$			
	A.	$\frac{x^2+2}{x}$	B.	$\frac{-2}{x^2}$
	C.	1	D.	$\frac{2}{x^2}$
૪૬.	$y = \frac{x+2}{x}$ માટે $\frac{dy}{dx} = \text{-----}.$			
	A.	$\frac{x^2+2}{x}$	B.	$\frac{-2}{x^2}$
	C.	1	D.	$\frac{2}{x^2}$
47.	Equation of the motion of moving particle is given by $s = 3t^2 - 2t + 17$ , then the velocity at $t = 1$ second is ____.			
	A.	6	B.	2
	C.	4	D.	1
૪૭.	એક ગતિ કરતા કણની ગતિ નું સમીકરણ $s = 3t^2 - 2t + 17$ છે, તો $t = 1$ સેકન્ડે કણનો વેગ ____ થાય.			
	A.	6	B.	2
	C.	4	D.	1
48.	If $f(x)$ has maximum value at $x = x_1$ then ____.			
	A.	$f'(x_1) > 0$	B.	$f'(x_1) < 0$
	C.	$f'(x_1) = 0$	D.	$f'(x_1) > 0$ or $f'(x_1) < 0$
૪૮.	જો વિધેય $f(x)$ ને $x = x_1$ પાસે મહત્તમ મુલ્ય હોય તો ____.			
	A.	$f'(x_1) > 0$	B.	$f'(x_1) < 0$



	C.	$f'(x_1) = 0$	D.	$f'(x_1) > 0$ or $f'(x_1) < 0$
49.	$\frac{d}{dx}(x^x) = x^x ( \text{-----} )$ .			
	A.	$1 - \log x$	B.	$1 + \log x$
	C.	$x^x(1 - \log x)$	D.	$x^x(1 + \log x)$
੪੯.	$\frac{d}{dx}(x^x) = x^x ( \text{-----} )$ .			
	A.	$1 - \log x$	B.	$1 + \log x$
	C.	$x^x(1 - \log x)$	D.	$x^x(1 + \log x)$
50.	If $y = \cos^2 x + \sin^2 x$ than $\frac{dy}{dx} = \text{-----}$ .			
	A.	0	B.	1
	C.	2	D.	-1
੫੦.	$y = \cos^2 x + \sin^2 x$ ਚਲੇ $\frac{dy}{dx} = \text{-----}$ .			
	A.	0	B.	1
	C.	2	D.	-1
51.	$\int 4x^3 dx = \text{-----}$ .			
	A.	$4x^4 + c$	B.	$x^4 + c$
	C.	$x^3 + c$	D.	$12x^3 + c$
੫੧.	$\int 4x^3 dx = \text{-----}$ .			
	A.	$4x^4 + c$	B.	$x^4 + c$
	C.	$x^3 + c$	D.	$12x^3 + c$
52.	$\int \frac{1}{1+x^2} dx = \text{-----}$ .			
	A.	$-\tan^{-1} x + c$	B.	$\tan x + c$
	C.	$\tan^{-1} x + c$	D.	$2x + c$
੫੨.	$\int \frac{1}{1+x^2} dx = \text{-----}$ .			
	A.	$-\tan^{-1} x + c$	B.	$\tan x + c$
	C.	$\tan^{-1} x + c$	D.	$2x + c$
53.	$\int_{-3}^3 x dx = \text{-----}$ .			
	A.	3	B.	3/2
	C.	0	D.	1
੫੩.	$\int_{-3}^3 x dx = \text{-----}$ .			
	A.	3	B.	3/2
	C.	0	D.	1
54.	$\int u(x)v(x)dx = u(x)\int v(x)dx - \int [ \text{-----} ] \int v(x)dx dx$ .			
	A.	$\frac{d}{dx}u(x)$	B.	$\int u(x)dx$
	C.	$\int u(x)dx$	D.	$\frac{d}{dx}[v(x)]$
੫੪.	$\int u(x)v(x)dx = u(x)\int v(x)dx - \int [ \text{-----} ] \int v(x)dx dx$ .			

	A.	$\frac{d}{dx}u(x)$	B.	$\int u(x)dx$
	C.	$\int u(x)dx$	D.	$\frac{d}{dx}[v(x)]$
55.	$\int_0^{\pi} \sin x dx = \dots$			
	A.	2	B.	-2
	C.	0	D.	1
૫૫.	$\int_0^{\pi} \sin x dx = \dots$			
	A.	2	B.	-2
	C.	0	D.	1
56.	$\int (2x-1) dx = \dots + c$			
	A.	$x^2 - 2x + c$	B.	$x^2 - x + c$
	C.	$x^2 + x + c$	D.	$x^2 + 2x + c$
૫૬.	$\int (2x-1) dx = \dots + c$			
	A.	$x^2 - 2x + c$	B.	$x^2 - x + c$
	C.	$x^2 + x + c$	D.	$x^2 + 2x + c$
57.	Area bounded by the curves $y = x^2$ , $X - axis$ and lines $x = 0, x = 1$ is _____.			
	A.	0	B.	1
	C.	1/3	D.	2/3
૫૭.	વક્રો $y = x^2$ , $X - axis$ અને $x = 0, x = 1$ વડે ઘેરાયેલા પ્રદેશનું ક્ષેત્રફળ _____ થાય.			
	A.	0	B.	1
	C.	1/3	D.	2/3
58.	If mean of observations 4, 7, 6, a, 5, 9 is 6 then value of a is _____.			
	A.	6	B.	4
	C.	5	D.	2
૫૮.	અવલોકનો 4,7,6, a, 5,9 નો મધ્યક જો 6 હોય તો a=_____.			
	A.	6	B.	4
	C.	5	D.	2
59.	If median of observations 12, 9, 14,23, b, 18, 8 is 16 then value of b is _____.			
	A.	16	B.	17
	C.	18	D.	20
૫૯.	અવલોકનો 12, 9, 14,23, b, 18, 8 નો મધ્યસ્થ જો 16 હોય તો b=_____.			
	A.	16	B.	17
	C.	18	D.	20
60.	If the mode of observations 2, 3, 3, 2, 5, 3, 7, 8, 2, c, 7 is 3 then value of c is _____.			
	A.	2	B.	7
	C.	3	D.	8
૬૦.	અવલોકનો 2, 3, 3, 2, 5, 3, 7, 8, 2, c, 7 નો બહુલક જો 3 હોય તો c=_____.			
	A.	2	B.	7
	C.	3	D.	8
61.	Mean of first five prime numbers is _____.			
	A.	5.5	B.	5
	C.	5.7	D.	5.6
૬૧.	પ્રથમ પાંચ અવિભાજ્ય સંખ્યાઓનો મધ્યક _____ છે.			
	A.	5.5	B.	5
	C.	5.7	D.	5.6

62.	Median of first six prime numbers is _____.			
	A.	5	B.	6
	C.	7	D.	4
૬૨.	પ્રથમ પાંચ અવિભાજ્ય સંખ્યાઓનો મધ્યસ્થ _____ છે.			
	A.	5	B.	6
	C.	7	D.	4
63.	X-intercept of the line $y + 4 = 0$ is _____.			
	A.	-4	B.	4
	C.	0	D.	Not defined.
૬૩.	રેખા $y + 4 = 0$ નો X-અંતઃખંડ _____ છે.			
	A.	-4	B.	4
	C.	0	D.	વ્યાખ્યાયિત નથી.
64.	Slope of the line $4x - 2y + 11 = 0$ is _____.			
	A.	3	B.	2
	C.	4	D.	11
૬૪.	રેખા $4x - 2y + 11 = 0$ નો ઢાળ _____ છે.			
	A.	3	B.	2
	C.	4	D.	11
65.	Centre of the circle $x^2 + (y - 2)^2 = 0$ is _____.			
	A.	(0, 2)	B.	(0, -2)
	C.	(1, 2)	D.	(2, 2)
૬૫.	વર્તુળ $x^2 + (y - 2)^2 = 0$ નું કેન્દ્ર _____ છે.			
	A.	(0, 2)	B.	(0, -2)
	C.	(1, 2)	D.	(2, 2)
66.	Equation of the circle whose centre is (0,0) and radius is 3 is _____.			
	A.	$x^2 + y^2 = 3$	B.	$x^2 + y^2 = 2$
	C.	$x^2 + y^2 = 9$	D.	$(x - 3)^2 + (y - 3)^2 = 0$
૬૬.	જો વર્તુળનું કેન્દ્ર (0,0) અને ત્રિજ્યા 3 હોય તે વર્તુળ નું સમીકરણ _____ થાય.			
	A.	$x^2 + y^2 = 3$	B.	$x^2 + y^2 = 2$
	C.	$x^2 + y^2 = 9$	D.	$(x - 3)^2 + (y - 3)^2 = 0$
67.	If general equation of the circle is $x^2 + y^2 + 2gx + 2fy + c = 0$ then radius is _____.			
	A.	$2g + 2f + c$	B.	$c$
	C.	$\sqrt{g^2 + f^2 + c} = 0$	D.	$c^2$
૬૭.	જો વર્તુળનું વ્યાપક સમીકરણ $x^2 + y^2 + 2gx + 2fy + c = 0$ હોય તો તેની ત્રિજ્યા _____ થાય.			
	A.	$2g + 2f + c$	B.	$c$
	C.	$\sqrt{g^2 + f^2 + c} = 0$	D.	$c^2$
68.	If distance between points A(x,-1) and B(3,2) is 5 then $x =$ _____.			
	A.	$x = -7$ or $x = -1$	B.	$x = 7$ or $x = -1$
	C.	$x = -7$ or $x = 1$	D.	$x = 7$ or $x = 1$
૬૮.	જો બિંદુઓ A(x,-1) અને B(3,2) વચ્ચેનું અંતર 5 એકમ હોય તો $x =$ _____.			
	A.	$x = -7$ or $x = -1$	B.	$x = 7$ or $x = -1$
	C.	$x = -7$ or $x = 1$	D.	$x = 7$ or $x = 1$
69.	Equation of line passing through points (3,2) and (-3,2) is _____.			
	A.	$y = 2$	B.	$x = -3$

	C.	$2x + 3y = 1$	D.	$x = 3$
56.	બિંદુઓ (3,2) અને (-3,2) માંથી પસાર થતી રેખાનું સમીકરણ ___ થાય.			
	A.	$y = 2$	B.	$x = -3$
	C.	$2x + 3y = 1$	D.	$x = 3$
70.	If (1, -1), (b, 5) and (2,1) are colinear then value of b=_____.			
	A.	-4	B.	3
	C.	4	D.	1
90.	જો બિંદુઓ (1, -1), (b, 5) અને (2,1) સમરેખ હોય તો b=_____.			
	A.	-4	B.	3
	C.	4	D.	1

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