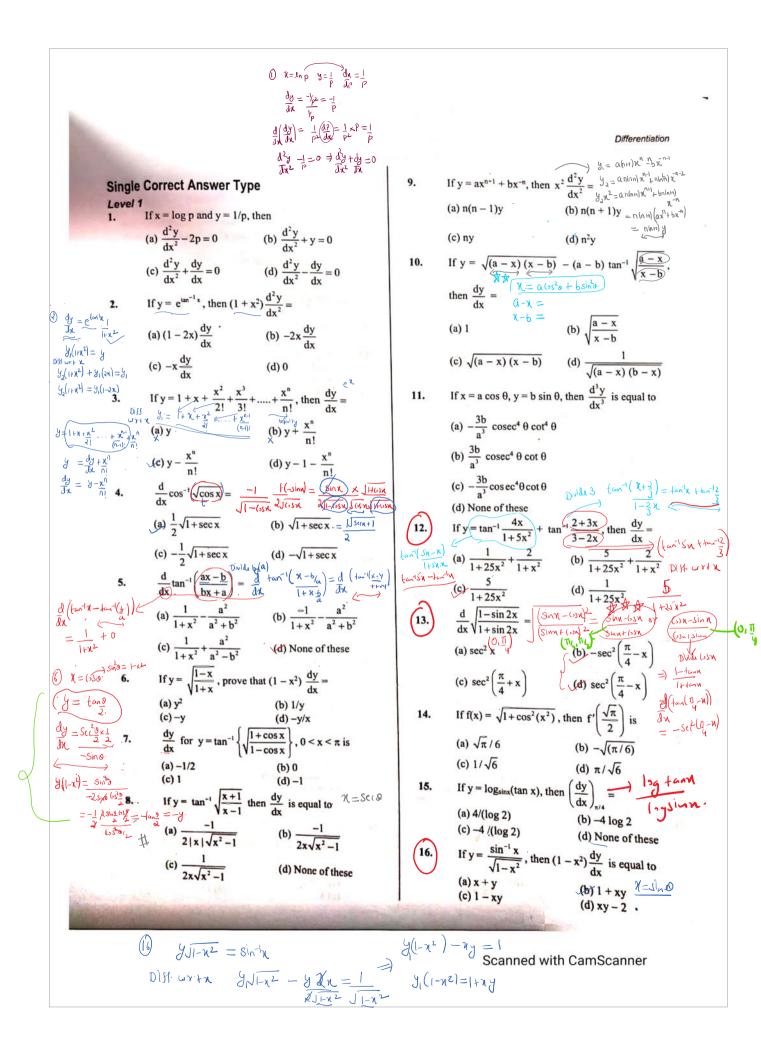
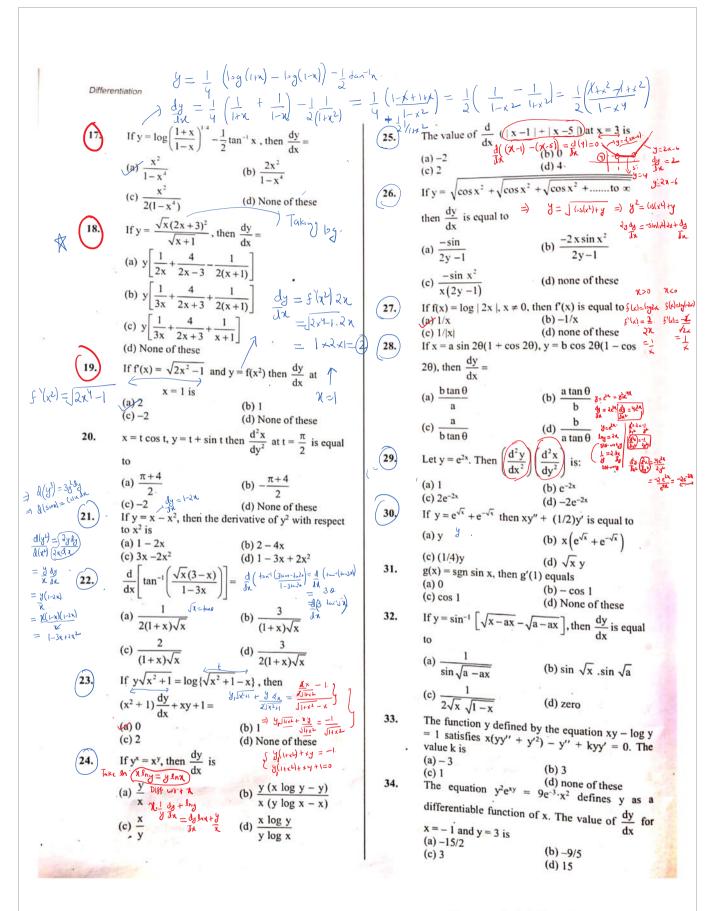
level-1 MOD PRACTICE

27 June 2020 12:48







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35. If
$$x = \sin^{-1} t$$
 and $y = \log (1 - t^2)$; then $\frac{d^2 y}{dx^2}\Big|_{t=1/2}$ is

$$(a) - 8/3$$

(b)
$$8/3$$

$$(d) -3/4$$

36.
$$\frac{dy}{dx}$$
 for $y = \tan^{-1} \left\{ \frac{1 - \cos x}{\sin x} \right\}, -\pi < x < \pi \text{ is}$

$$(c) -1/2$$

$$(d) -1$$

37. Let
$$y = \ln (1 + \cos x)^2$$
 then the value of
$$\frac{d^2y}{dx^2} + \frac{2}{e^{y/2}}$$
 equals

(a) 0

(b)
$$\frac{2}{1+\cos x}$$

(c)
$$\frac{4}{(1+\cos x)}$$

(a) 0 . (b)
$$\frac{1+\cos x}{1+\cos x}$$

(c) $\frac{4}{(1+\cos x)}$. (d) $\frac{-4}{(1+\cos x)^2}$

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Leve	11								
1.	(c)	2.	(a)	3.	(b)	4.	(a)	5.	(d)
6.	(c)	7.	(a)	8.	(a)	9.	(b) ·	10.	(b)
11.	(c)	12.	(c)	13.	(b)	14.	(b)	15.	(c)
16.	(b)	17.	(a)	18.	(a)	19.	(a)	20.	(b)
21.	(d)	22.	(d)	23.	(a)	24.	(b)	25.	(b)
26.	(b)	27.	(a)	28.	(a)	29.	(d)	30.	(c)
31.	(a)	32.	(c)	33.	(b)	34.	(d)	35.	(a)
36.	(b)	37.	(a)						

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