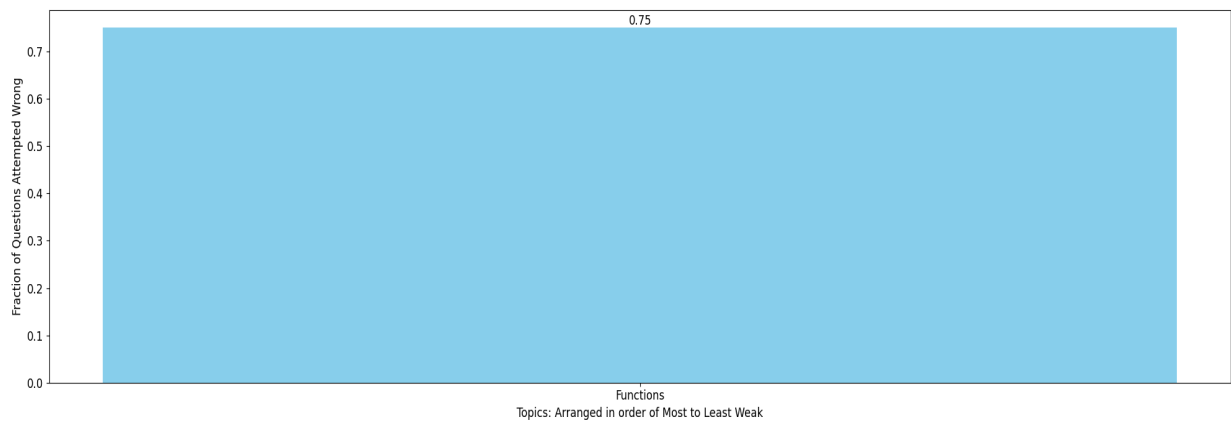


Anurag Tewary Total
MLAssist - Personalised DPP

Question Paper Analysis:



Weak Topic Analysis:



Practice Questions:

Functions:

6. Let $\{x\}$ & $[x]$ denote the fractional and integral part of a real number x respectively.
Solve $4\{x\} = x + [x]$
10. If $h(x) = Ax^5 + B\sin x + C\ln\left(\frac{1+x}{1-x}\right) + 7$, where A, B, C are non-zero real constants and $h\left(\frac{-1}{2}\right) = 6$, then find the value of $h\left(\frac{\operatorname{sgn}(e^{-x})}{2}\right)$.

Daily Work Sheet-4

SINGLE CORRECT TYPE

2. The function $f(x)$ is defined by $f(x) = \cos^4 x + K\cos^2 2x + \sin^4 x$, where K is a constant. If the function $f(x)$ is a constant function, the value of k is
(A) -1 (B) -1/2 (C) 0 (D) 1/2
5. If $f(x) = |x + 2| + |2x - p| + |x - 2|$ attains its minimum value in the interval $(-1, 1)$ then sum of all possible integral value of p is
(A) 0 (B) 1 (C) 3 (D) 4

PARAGRAPH BASED

Paragraph for question nos. 6&7

Let $f(x) = x^2 - 2x - 1 \forall x \in \mathbb{R}$. Let $f: (-\infty, a] \rightarrow [b, \infty)$, where 'a' is the largest real number for which $f(x)$ is bijective.

4. If $X = \{4^n - 3n - 1 : n \in \mathbb{N}\}$ and $Y = \{9(n - 1) : n \in \mathbb{N}\}$, where \mathbb{N} is the set of natural numbers, then $X \cup Y$ is equal to :
(A) \mathbb{N} (B) $Y - X$ (C) X (D) Y

[JEE - Main 2014]

