TEMPLATE FOR ASSESSMENTS

1. **Read Guidelines – in case of any doubt check with your mentor.**
2. **The final submission will have to be in soft copy in MS word as per template shared below.**
3. **Use Calibri font size 9**
4. **Keep Questions short and crisp. Word count should not exceed 20 words for questions and 8 words for options.**
5. **In the last row – mention the correct option as a) or b)**
6. **The Blooms level has been fixed – so please design question accordingly.**
7. **The rows heights have been fixed, so that the table size is not changed. If you have any problem, use this link to learn how to fix it YouTube**

Insert the exact details within the < >

<22103>: <BMS>: <Basic Mathematics>: <Factorization and de-factorization>: <co2_uo2.3>: <Assessments>: <Formative>

<Mrs. Sujata Patil >

Assessment Type: Formative Assessments: Embedded questions in video

Set 1: Question No 1	Set 1: Question No 2	Set 1: Question No 3
Find 2 cos 75^0 cos 15^0 =	**Solve:** $\frac{\sin 8A + \sin 2A}{\cos 8A + \cos 2A}$	**If sin** $80^0 + \sin 50^0 = 2sin\alpha cos\beta$, $then\ \alpha\ and\ \beta\ are$
Recall/ Remembering	**Understanding**	**Application**
a) 1	**a)tan A**	**a)** $60^0 and\ 20^0$
b) $\frac{1}{2}$	**b) cot5A**	**b)** $60^0 and\ 15^0$
c)-1	**c) tan5A**	**c)** $65^0 and\ 15^0$
d) $\frac{-1}{2}$	**d) tan3A**	**d)** $65^0\ and\ 20^0$
Ans: <b>	**Ans: <c>**	**Ans: <c>**

Set 2: Question No 1	Set 2: Question No 2	Set 2: Question No 3
2sin3x cos 2x=	**Solve:** $\frac{sin5x+sin3x}{cos5x+cos3x}$	**Express** $cos30^0$ **sin** 20^0 **as the sum or difference**
Recall/ Remembering	**Understanding**	**Understanding**
a)sin5x+ sin x	**a)cot x**	**a)2(** $\sin 50^0 - sin10^0$ **)**
b) sin3x+sinx	**b) cot4x**	**b)** $\frac{1}{2}$**(** $\sin 50^0 - sin10^0$ **)**
c) sin7x+sinx	**c) tan x**	**c) (** $\sin 50^0 - sin10^0$ **)**
d) sin4x+sinx	**d) tan4x**	**d) (** $\sin 50^0 + sin10^0$ **)**
Ans: <a>	**Ans: <d>**	**Ans: <b>**

Assessment Type: Summative: End of CO: in LMS

Summative: Q 1	Summative: Q 2	Summative: Q 3	Summative: Q 4	Summative: Q 5
The value of $\cos 75^0 cos15^0$	**If 2sin** $40^0 \cos 10^0$ **= sin A +sin B Then A,B equal to**	**The value of** $\sin 10^0 sin30^0 sin 50^0$ **sin**70^0 **is equal to**	**Evaluate** $\frac{cos6\theta + cos2\theta}{sin6\theta + sin2\theta}$	**Evaluate** $\frac{sin19^0 + cos11^0}{cos19^0 - sin11^0}$
Recall/ Remembering	**Understanding**	**Application**	**Understanding**	**Application**
a) $\frac{1}{2}$	**a)** $50^0 and 20^0$	**a)** $\frac{1}{8}$	**a) cot4θ**	**a) 1**
b) $\frac{1}{\sqrt{2}}$	**b)** $70^0 and 50^0$	**b)** $\frac{1}{16}$	**b) cot2 θ**	**b)** $\frac{1}{\sqrt{2}}$
c) $\frac{1}{4}$	**c)** $60^0 and 10^0$	**c)** $\frac{\sqrt{3}}{8}$	**c) tan θ**	**c)** $\sqrt{3}$
d)1	**d)** $50^0 and 30^0$	**d)** $\frac{\sqrt{3}}{16}$	**d) tan4 θ**	**d) 0**
Ans: <c>	**Ans: <d>**	**Ans: <b>**	**Ans: <a>**	**Ans: <c>**

Assessment Type: Practice Worksheets: End of CO: in LMS/ downloadable PDF

If students have access to laptop/ desktop – they can answer it on LMS, else download it and answer it and file it for later use. They can also copy the question in their notebook in case the space provided is insufficient.

1. Best suited for subjective questions.
2. Numerical problems
3. Short answer questions

A. **Question Space** $\boldsymbol{Show\ that\ \frac{sin3A-sinA}{cos3A+cosA} = tanA}$	**B. Question Space** **Apply factorization formulae to simplify** $\boldsymbol{\frac{sin8x - sin5x}{cos7x + cos6x} =}$
A. Answer Space	**B. Answer Space**

C. Question Space **Without using calculator show that** **cos 10^o cos 50^0 cos 70^o =** $\frac{\sqrt{3}}{8}$	**D. Question Space** **Prove:** $\frac{\sin 8x - \sin 5x}{\cos 7x + \cos 6x} = \sin x + \cos x \cdot \tan\left(\frac{x}{2}\right)$
C. Answer Space	**D. Answer Space**
E. Question Space **Prove:** $\frac{\sin 35° + \sin 25°}{\cos 35° + \cos 25°} = \frac{1}{\sqrt{3}}$	**F. Question Space** **Prove:** $\frac{\sin 11A \cdot \sin A + \sin 7A \cdot \sin 3A}{\cos 11A \cdot \sin A + \cos 7A \cdot \sin 3A} = \tan 8A$

E. Answer Space	F. Answer Space
G. Question Space **Prove:** $\frac{\cos 2A + 2\cos 4A + \cos 6A}{\cos A + 2\cos 3A + \cos 5A} = \cos A - \sin A \cdot \tan 3A$	**H. Question Space** **Prove:** $\cos 20^0 \cdot \cos 40^0 \cdot \cos 60^0 \cdot \cos 80^0 = \frac{1}{16}$

G. Answer Space	H. Answer Space