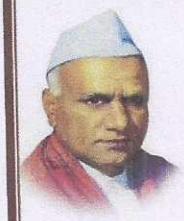

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Vivekanand College, Kolhapur (Autonomous)

KOLHAPUR (AUTONOMOUS)

Index

Remedial Coaching: 2018-2019

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR
Department of Mathematics
REMEDIAL COACHING: 2018-2019
Notice

All the students of First year 2018-19 are hereby informed that first test will be conducted on 06/08/2018 . On basis of this test students will be sorted for remedial coaching 2018-19.

Venue : Room. No. 39

Time: 02:00 pm to 03:00 pm

VIVEKANAND COLLEGE ESTD. JUNE 1964 KOLHAPUR-416003

(Mr. S. P. Patankar)
HEAD
Department of Mathematics
Vivekanand College, Kolhapur

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

Department of Mathematics

REMEDIAL COACHING: 2018-2019

Notice

All the students of remedial coaching 2018-19 are hereby informed that Second test will be conducted on 15/09/2018,

Venue : Room. No. 39

Time : 02:00 pm to 03:00 pm

VIVEKANAND COLLEGE ESTD. JUNE 1964 KOLHAPUR-416 003

(Mr. S. P. Patankar)
HEAD
Department of Mathematics
Vivekanand College, Kolhapur

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

Department of Mathematics

REMEDIAL COACHING: 2018-2019

List

Sr. No.	Name of the Student
1	Ankita Raviraj Sharma
2	Akanksha Dhanaji Patil
3	Unmesha Sunil Devardekar
4	Priyanka Bajirao Chougale
5	Manisha Madhukar Khambe
6	Sandip Sukumar Khandekar
7	Abhinandan Mahaveer Chougale
8	Digvijay Suresh Yadav
9	Akshay Dadaso Kumbhar

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Department of Mathematics
Vivekanand College, Kolhapur

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

Department of Mathematics

REMEDIAL COACHING: 2018-2019

Presenty

Date

Sr. No.	Name of the Students	17/08/2018	18/08/2018	24/08/2018	25/08/2018	31/08/2018
1	Ankita Raviraj Sharma	P	P	P	P	P
2	Akanksha Dhanaji Patil	AB	P	P	P	P
3	Unmesha Sunil Devardekar	P	P	P	P	P
4	Priyanka Bajirao Chougale	P	P	AB	P	P
5	Manisha Madhukar Khambe	P	P	P	P	P
6	Sandip Sukumar Khandekar	P	AB	P	AB	P
7	Abhinandan Mahaveer Chougale	P	AB	P	P	P
8	Digvijay Suresh Yadav	P	P	P	P	AB
9	Akshay Dadaso Kumbhar	P	P	P	P	P

Date

Sr. No.	Name of the Student	01/09/2018	07/09/2018	08/09/2018	14/09/2018	15/09/2018
1	Ankita Raviraj Sharma	AB	P	P	P	P
2	Akanksha Dhanaji Patil	P	P	AB	P	P
3	Unmesha Sunil Devardekar	P	P	P	P	P
4	Priyanka Bajirao Chougale	P	AB	P	P	P
5	Manisha Madhukar Khambe	P	P	P	P	P
6	Sandip Sukumar Khandekar	P	P	P	P	P
7	Abhinandan Mahaveer Chougale	P	P	P	AB	P
8	Digvijay Suresh Yadav	P	P	P	P	P
9	Akshay Dadaso Kumbhar	P	P	P	P	AB

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Department of Mathematics
Vivekanand College, Kolhapur

VIVEKANAND COLLEGE (AUTONOMOUS), KOLHAPUR

Department of Mathematics

REMEDIAL COACHING: 2018-2019

Marks and Progress

Sr. No.	Name of the Student	First Test	Second Test	Progress
1	Ankita Raviraj Sharma	08	12	20%
2	Akanksha Dhanaji Patil	06	16	50%
3	Unmesha Sunil Devardekar	08	14	30%
4	Priyanka Bajirao Chougale	07	15	40%
5	Manisha Madhukar Khambe	01	16	75%
6	Sandip Sukumar Khandekar	04	17	55%
7	Abhinandan Mahaveer Chougale	08	13	25%
8	Digvijay Suresh Yadav	07	12	25%
9	Akshay Dadaso Kumbhar	04	15	55%

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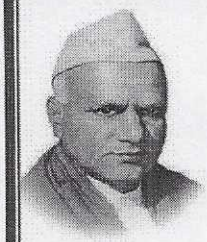

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Vivekanand College, Kolhapur (Autonomous)

KOLHAPUR (AUTONOMOUS)

2018-19

Report: Remedial Coaching

1. Name of Department : **Mathematics**

2. Name of Organized Activity : Remedial Coaching

3. Date/ Duration : 17/08/2018 – 15/09/2018

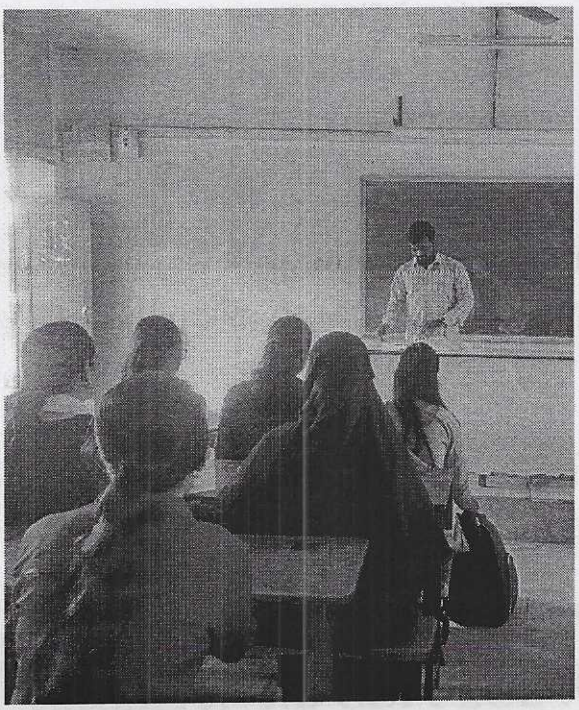
4. Aims and Objectives : 1. To develop basic knowledge about mathematics in average student.
2. To provide academic support slow learner need.

5. No. of beneficiaries : **Total = 09**

Students	Male	04
	Female	05

6. Expenditure & funding agency : Nil

7. Brief description : On the behalf of Mathematics department remedial coaching was arranged for Slow learners. First test was taken on 06/08/2018 of 20 marks. Slow learners were chosen on basis of marks in first test. Total ten number of lectures were arranged from 17/08/2018 to 15/09/2018. Former faculty of department of mathematics conducted lectures in room no. 39 at 09:30 AM to 11: 30 AM on each Friday and Saturday. Students were eager to learn and were grateful to organiser.



8. Outcomes : 1. Students learns basic knowledge of mathematics.
2. Students improved relation with Professors and fellow students.

9. Photos : Enclosed

10. Signatures of coordinator/ organizer:
Mr. S.P. Patankar

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Department of Mathematics
Vivekanand College, Kolhapur

Vivekanand College, Kolhapur(Autonomous)

Department of Mathematics

Remedial Coaching : 2019-2020

Test – I

Date : 12/08/2019 **Marks : 20**

Name :

Note : Tick mark the correct alternative.

Q.1) The derivative of x^2 is....

$A)\ 2x$ $B)\ x$

$C)\ 2$ $D)\ 0$

Q.2) If $\int_0^a 3x^2 dx = 8$, find the value of a.

$A)\ 2$ $B)\ -3$ $C)\ 3$ $D)\ -2$

Q.3) If $y = e^{mx} + e^{-mx}$ then $\frac{d^2y}{dx^2} = \cdots$

$A)\ m^2y$ $B)\ my$ $c)\ -my$ $D)\ -m^2y$

Q.4) If $y = 5^x$ then $\frac{dy}{dx} = \cdots$

$A)\ x(5^{x-1})$ $B)\ \frac{5^x}{\log 5}$ $C)\ 5^x log5$ $D)\ None\ Of\ these$

Q.5) If A and B are symmetric matrices of same order, then $AB - BA$ is a .....

$A)\ Skew - symmetric\ matrix$ $B)\ Symmetric\ matrix$

$C)\ Zero\ matrix$ $D)\ Identity$

Q.6) If $A = \begin{bmatrix} 0 & 2 \\ 2 & 0 \end{bmatrix}$ then A^2 is...

$A)\ \begin{bmatrix} 0 & 4 \\ 4 & 0 \end{bmatrix}$ $B)\ \begin{bmatrix} 4 & 0 \\ 4 & 0 \end{bmatrix}$ $C)\ \begin{bmatrix} 0 & 4 \\ 0 & 4 \end{bmatrix}$ $D)\ \begin{bmatrix} 4 & 0 \\ 0 & 4 \end{bmatrix}$

Q.7) If A be square matrix of order 3×3 and k scalar, then $|kA|$is equal to....

$A)\ k|A|$ $B)\ |k||A|$ $C)\ k^3|A|$ $D)\ None\ Of\ these$

Q.8) If $n(A) = m, n(B) = n$ then the total number of non-empty relations that can be defined from A to B is...

$A)\ m^n$ $B)\ n^m - 1$ $C)\ mn - 1$ $D)\ 2^{mn} - 1$

Q.9) The maximum value of $z = 3x + 4y$ subjected to constraints $x + y \leq 4, x \geq 0$ and $y \geq 0$

$A)\ 12$ $B)\ 14$ $C)\ 16$ $D)\ 18$

Q.10) $\int_0^3 x^2\,dx = \cdots$

A) 2 B) $\frac{27}{3}$ C) $\frac{8}{3}$ D) $\frac{8}{9}$

Q.11) The magnitude of the vector $6\hat{\imath} + 2\hat{\jmath} + 3\hat{k}$ is equal to....

A) 5 B) 1 C) 7 D) 12

Q.12) The linear inequalities or equations or restrictions on the variables of a linear programming problem are called.....

A) *a constraints* B) *desicion variables*

C) *objective functions* D) *None of these*

Q.13) If $f(x) = x^3 - 12x^2 + 45x + 8$ at which point does f(x) has its maximum?

A) 1 B) 7 C) 3 D) 5

Q.14) The degree of the differential equation $\left(\frac{d^2y}{dx^2}\right)^{\frac{2}{2}} + 4 - 3\frac{dy}{dx} = 0$ is....

A) 2 B) 1 C) 3 D) $\frac{2}{3}$

Q.15) The maximum number of equivalence relations on the set $A = \{1,2,3\}$ are...

A) 1 B) 2 C) 3 D) 5

Q.16) The number of binary operations on the set {a, b} are....

A) 10 B) 16 C) 20 D) 8

Q.17) If $f(x) = x^3 - \frac{1}{x^3}$, then $f(x) + f(1/x) = \cdots$

A) $2x^3$ B) $2\frac{1}{x^3}$ C) 0 D) 1

Q.18) Which of the following function is odd function?

A) *sinx* B)*tanx* C) *Sec x* D) *cosec x*

Q.19) The line $y = x + 1$ is a tangent to the curve $y^2 = 4x$ at the point....

A) (1,2) B) (2,1) C) (−1,2) D) (1,−2)

Q.20) The differential equation of the function $c + 4yx = 0$ is....

A)$xy + \frac{dy}{dx} = 0$ B) $x\frac{dy}{dx} + y = 0$ C) $\frac{dy}{dx} - 4xy = 0$ D) $x\frac{dy}{dx} + 1 = 0$

Vivekanand College, Kolhapur(Autonomous)

Department of Mathematics

Remedial Coaching : 2019-2020

Test – II

Date : 13/09/2019 **Marks : 20**

Name :

Note : Tick mark the correct alternative.

Q.1) Value of k, for which $A = \begin{bmatrix} k & 8 \\ 4 & 2k \end{bmatrix}$ is a singular matrix is...

$A)\ 4$ $B)\ -4$ $C)\ \pm 4$ $D)\ 0$

Q.2) $\int_0^{\frac{\pi}{2}} \cos x\, dx = \cdots$

$A)\ 1$ $B)\ \frac{1}{2}$ $C)\ \frac{-1}{2}$ $D)\ -1$

Q.3) The linear inequalities or equations or restrictions on the variables of a linear programming problem are called.....

$A)$ *a constraints* $B)$ *desicion variables*

$C)$ *objective functions* $D)$ *None of these*

Q.4) If $y = x^3 logx$ then $\frac{dy}{dx} = \cdots$

$A)\ x^2(1 + 3\log x)$ $B)\ x^2(1 - 3\log x)$ $C)\ x^3(1 + \log x)$ $D)\ x^3(1 + 3\log x)$

Q.5) The function f(x) = x + cos x is

$A)$ *Always increasing* $B)$ Always decreasing

$C)$ *increasing for a certain range of* x $D)$ *None of these*

Q.6) The value of the x if $\begin{vmatrix} 2+x & 3+x & 4+x \\ 1 & 2 & -1 \\ 2 & 1 & 3 \end{vmatrix} = 0$

$A)\ x = -3$ $B)\ 13$ $C)\ \frac{-1}{13}$ $D)\ -13$

Q.7) A solution which satisfies the non-negativity restrictions of L.P.P. is called as ....

$A)$ Feasible solution $B)$Optimal solution

$C)$ Non-feasible solution $D)$ *None of these*

Q.8) Set A has 3 elements, and set B has 4 elements. Then the number of injective mappings that can be defined from A to B is

$A)\ 144$ $B)\ 12$ $C)\ 24$ $D)\ 64$

Q.9) If $A = \begin{bmatrix} 0 & 3 \\ 3 & 0 \end{bmatrix}$ then A^2 is...

A) $\begin{bmatrix} 0 & 9 \\ 9 & 0 \end{bmatrix}$ B) $\begin{bmatrix} 4 & 0 \\ 4 & 0 \end{bmatrix}$ C) $\begin{bmatrix} 0 & 4 \\ 0 & 4 \end{bmatrix}$ D) $\begin{bmatrix} 4 & 0 \\ 0 & 4 \end{bmatrix}$

Q.10) The magnitude of the vector $4\hat{\imath} + 2\hat{\jmath} + 4\hat{k}$ is equal to....

A) 5 B) 7 C) 6 D) 12

Q.11) The number of binary operations on the set $\{a, b\}$ are...

A) 10 B) 12 C) 16 D) 20

Q.12) If $P(A) = 0.8, P(B) = 0.5$ *and* $P(B/A) = 0.4$, what is value of $P(A \cap B) =$?

A) 0.5 B) 0.25 C) 0.1 D) 0.32

Q.13) If l,m,n are the direction cosines of a line, then...

A) $l^2 + m^2 + 2n^2 = 1$ B) $l^2 + m^2 + n^2 = 1$

C) $2l^2 + m^2 + n^2 = 1$ D) $l^2 + 2m^2 + n^2 = 1$

Q.14) If $x = t^2, y = t^3$, then $\frac{d^2y}{dx^2} =$...

A) $\frac{3}{2}$ B) $\frac{3}{4t}$ C) $\frac{3}{2t}$ D) $\frac{3t}{2}$

Q.15) The line $y = x + 3$ is a tangent to the curve $y^2 = 4x$ at the point....

A) (1,2) B) (2,1) C) (−1,2) D) (1, −2)

Q.16) If $\int_0^a 3x^2 dx = 27$, find the value of a.

A) 2 B) 3 C) − 3 D) − 2

Q. 17) The scalar product of 5i+j-3k and 3i-4j+7k is:

A) 15 B) − 15 C)10 D) − 10

Q.18) The magnitude of the vector $6\hat{\imath} + 2\hat{\jmath} + 3\hat{k}$ is equal to....

A) 5 B) 1 C) 7 D) 12

Q.19) If A be square matrix of order 3 × 3 and k scalar, then $|5A|$is equal to....

A) $5|A|$ B) $|25||A|$ C) $5^3|A|$ D) *None Of these*

Q.20) The directional ratios of the normal to the plane $7x + 4y - 2z + 5 = 0$ are...

A) 7,4, −2 B) 7,4,5 C) 7,4,2 D) 4, −2,5