Final Exam - EE920 - Wireless Communication

Venkateswar Reddy Melachervu | 25 Mar 2023

IIT KANPUR

Indian Institute of Technology Kanpur

Test Name::

Final Exam - EE920 - Wireless Communication

Finish State: Normal | Test Taken on: March 25, 2023 12:39:45 PM IST

VR

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Credibility Index: LOW

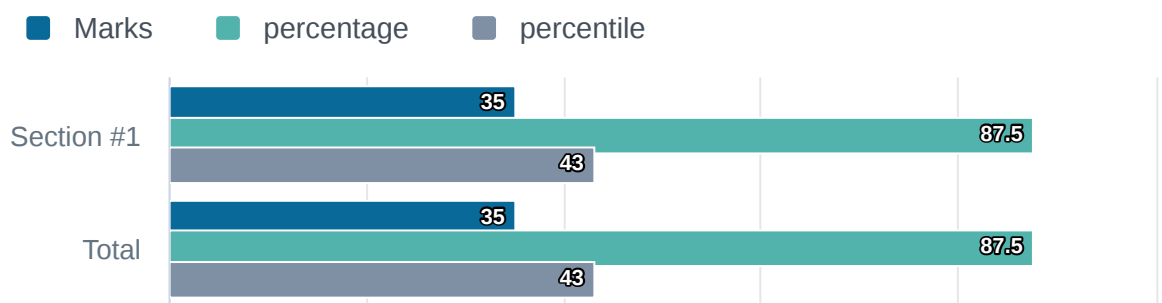
Profile Picture Snapshot

Identity Card Snapshot

Overall Summary

35 Marks Scored out of 40	87.5 % 43.48 percentile out of 23 Test Takers	2h 36m 53s Time taken of 3hr

Marks Scored



Attempt Summary

Distribution of questions attempted in a total of 40 question(s).

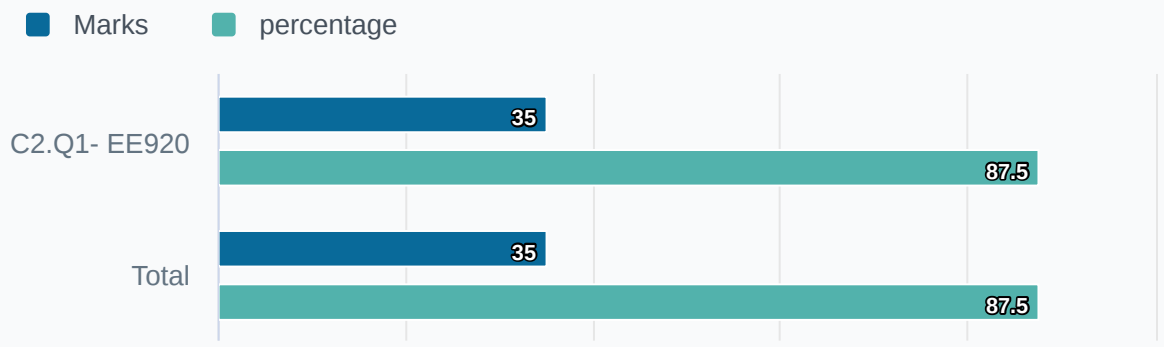
This shows the correctness of questions attempted by the test taker

Correct	35 Ques	35/35 Marks
Incorrect	5 Ques	0/5 Marks
Partially Correct	0 Ques	0/0 Marks
Not Attempted	0 Ques	0/0 Marks

Section-Wise Details

Section 1	question(s)	Time taken	Marks Scored
Section #1	40 Q.	2h 36m 53s (Untimed)	35 / 40

Marks Scored



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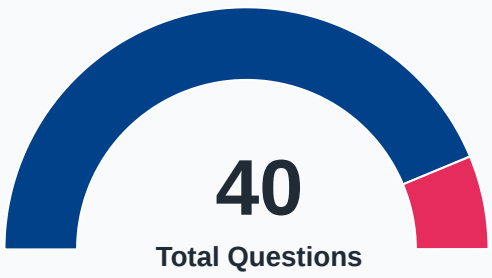

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Question-Wise Details

Section 1
Section #1

40
question(s)

2h 36m 53s
Time taken

Q. 1

Question 1

Time taken: 1m 25s

The PSD □ □□(□) of white noise is

Response:

OPTIONS	RESPONSE	ANSWER
$\frac{N_0}{2}\delta(\tau)$		
$\frac{1}{\sqrt{2\pi\sigma^2}}e^{\frac{(n-\mu)^2}{2\sigma^2}}$		
$\frac{1}{\sqrt{2\pi\sigma^2}}e^{\frac{n^2}{2\sigma^2}}$		
$\frac{N_0}{2}$	✓	✓

Q. 2

Question 2

Time taken: 26s

The bit error rate (BER) for QPSK is approximately

Response:

OPTIONS	RESPONSE	ANSWER
Equal to SER		
Twice the SER		
Half the SER	✓	✓
Has no relation to SER		

Q. 3

Question 3

Time taken: 33s

What is the approximate probability of deep fade □ □□ in the Rayleigh fading wireless channel?

Response:

OPTIONS	RESPONSE	ANSWER
SNR		
$\frac{1}{SNR}$	✓	✓
e^{-SNR}		
$\frac{1}{SNR^2}$		

Q. 4

Question 4

Time taken: 36s

BER of **multiple antenna system** is given as

Response:

OPTIONS	RESPONSE	ANSWER
$^{2L}C_L \times \frac{1}{2^L} \times \frac{1}{SNR^L}$		
$^{2L-1}C_{L-1} \times \frac{1}{2^L} \times \frac{1}{SNR^L}$	✓	✓
$^{2L-1}C_{L-1} \times \frac{1}{SNR^L}$		
$^{2L-1}C_L \times \frac{1}{2^{2L}} \times \frac{1}{SNR^{2L}}$		

Q. 5

Question 5

Time taken: 47s

Inverse of a matrix exists for

Response:

OPTIONS	RESPONSE	ANSWER
Any matrix		
Any square matrix		
Only Non-singular square matrices	✓	✓
Any positive semi-definite matrix		

Q. 6

Question 6

Time taken: 10s

The matrices □,□ in the SVD are

Response:

OPTIONS	RESPONSE	ANSWER
Positive Semi-Definite		
Positive Definite		
Unitary	✓	✓
Symmetric		

Q. 7

Question 7

Time taken: 53s

As the bandwidth of the wireless channel increases, symbol duration decreases. This leads to

Response:

OPTIONS	RESPONSE	ANSWER
Inter symbol interference	✓	✓
Fading		
Near far user problem		
Beamforming		

Q. 8

Question 8

Time taken: 36s

In OFDM, _____ and _____ are performed at the transmitter and receiver, respectively

Response:

OPTIONS	RESPONSE	ANSWER
FFT, FFT		
IFFT, FFT	✓	✓
FFT, IFFT		
IFFT, IFFT		

Q. 9

Question 9

Time taken: 1m 14s

SNR required to achieve a given BER for BPSK modulation in the wireline system is given as

Response:

OPTIONS	RESPONSE	ANSWER
□ $^{-1}$(□□□)		
□ $^{-}$□□□		
(□ $^{-1}$(□□□)) ^{2}	✓	✓
$\frac{1}{2} \times \frac{1}{BER}$		

Q. 10

Question 10

Time taken: 29s

The value of □(1) is

Response:

OPTIONS	RESPONSE	ANSWER
$\int_{1}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-\frac{t^2}{2}} dt$	✓	✓
$\int_{1}^{\alpha} \frac{1}{\sqrt{2\pi}} e^{-1} dt$		
$\int_{\infty}^{1} \frac{1}{\sqrt{2\pi}} e^{-\frac{t^2}{2}} dt$		
$\int_{-1}^{1} \frac{1}{\sqrt{2\pi}} e^{-\frac{t^2}{2}} dt$		

Q. 11

Question 11

Time taken: 2m 8s

The channel magnitude a =|□| follows the PDF given as

Response:

OPTIONS	RESPONSE	ANSWER
$2ae^{-a^2}, a \geq 0$	✓	✓
$2ae^{-a^2}, -\infty < a < \infty$		
$ae^{-2a^2}, a \geq 0$		
$2ae^{-2a^2}, -\infty < a < \infty$		

Q. 12

Question 12

Time taken: 3m 24s

SER for 256−QAM is

Response:

OPTIONS	RESPONSE	ANSWER
$\frac{7}{2}Q\left(\sqrt{\frac{P}{21N_0}}\right)$		
$\frac{7}{2}Q\left(\sqrt{\frac{2P}{1365N_0}}\right)$		
$\frac{7}{2}Q\left(\sqrt{\frac{P}{85N_0}}\right)$		
$\frac{15}{4}Q\left(\sqrt{\frac{P}{85N_0}}\right)$	✓	✓

Q. 13

Question 13

Time taken: 1m 27s

Consider channel coefficient □ and □=|□| and □□□=40 □□. Condition for deep fade in the wireless channel is

Response:

OPTIONS	RESPONSE	ANSWER
□<0.01	✓	✓
□ ^{2}<0.1		
□ ^{2}<0.15		
□<0.0001		

Q. 14

Question 14

Time taken: 25s

To prevent disruption in communication due to a single link in a deep fade one should implement

Response:

OPTIONS	RESPONSE	ANSWER
Non-linear receiver		
Low carrier frequency		
Analog modulation		
Multiple links	✓	✓

Q. 15

Question 15

Time taken: 1m 19s

The SNR at the output of the MRC beamformer is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\|\|\bar{\mathbf{h}}\|\| \frac{P}{N_0}$		
$\|\|\bar{\mathbf{h}}\|\|^2 \frac{P}{N_0}$	✓	✓
$\bar{\mathbf{h}}^2 \frac{P}{N_0}$		
$\frac{P}{N_0}\sqrt{\|\|\bar{\mathbf{h}}\|\|}$		

Q. 16

Question 16

Time taken: 2m 45s

Consider the channel vector

$$\bar{\mathbf{h}} = \begin{bmatrix} -\sqrt{\frac{1}{2}} - \sqrt{\frac{1}{2}}j \\ -\sqrt{\frac{1}{2}} + \sqrt{\frac{1}{2}}j \end{bmatrix}$$

The MRC beamformer is

Response:

OPTIONS	RESPONSE	ANSWER
$\begin{bmatrix} -\frac{1}{2} + \frac{1}{2}j \\ -\frac{1}{2} - \frac{1}{2}j \end{bmatrix}$		
$\begin{bmatrix} -\frac{1}{2} - \frac{1}{2}j \\ -\frac{1}{2} + \frac{1}{2}j \end{bmatrix}$	✓	✓
$\begin{bmatrix} -1 - j \\ -1 + j \end{bmatrix}$		
$\begin{bmatrix} -\sqrt{\frac{1}{2}} - \sqrt{\frac{1}{2}}j \\ -\sqrt{\frac{1}{2}} + \sqrt{\frac{1}{2}}j \end{bmatrix}$		

Q. 17

Question 17

Time taken: 17s

MIMO Technology is used in

Response:

OPTIONS	RESPONSE	ANSWER
All of these	✓	✓
Only 4G LTE		
Only 5G NR		
Only 802.11 ax		

Q. 18

Question 18

Time taken: 8m 10s

Consider the output vector $\bar{y}$ and MIMO channel **H** given below $\bar{\mathbf{y}} = \begin{bmatrix} 2 \\ -3 \\ -2 \\ 1 \end{bmatrix}, \mathbf{H} = \begin{bmatrix} 1 & 4 \\ 1 & 3 \\ 1 & 1 \\ 1 & 2 \end{bmatrix}$

The zero-forcing (ZF) estimate is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\frac{1}{10}\begin{bmatrix} -25 \\ 8 \end{bmatrix}$	✓	✓
$\frac{1}{10}\begin{bmatrix} 35 \\ -16 \end{bmatrix}$		
$\frac{1}{10}\begin{bmatrix} -15 \\ 16 \end{bmatrix}$		
$\frac{1}{10}\begin{bmatrix} 25 \\ 12 \end{bmatrix}$		

Q. 19

Question 19

Time taken: 6m 38s

The maximum rate of transmission for the □th MIMO mode is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\log_2\left(1+\frac{P_i}{\sigma_i^2 N_0}\right)$		
$\log_2\left(1+\sigma_i^2 \times \frac{P_i}{N_0}\right)$	✓	✓
$\log_2\left(1+\frac{P_i}{N_0}\right)$		
$\log_2\left(1+\frac{P_i}{\sigma_i N_0}\right)$		

Q. 20

Question 20

Time taken: 40s

The matrix **U** contains **eigenvectors** of

Response:

OPTIONS	RESPONSE	ANSWER
$H^H H$		
$H^H H^H$		
$H H^H$	✓	✓
HH		

Q. 21

Question 21

Time taken: 1m 16s

Let the vector transmitted in the first time instant in the Alamouti code be given as

$$\begin{bmatrix} 1-2j \\ -3+j \end{bmatrix}$$

The vector transmitted in the second time instant is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\begin{bmatrix} 3+j \\ 1-2j \end{bmatrix}$		
$\begin{bmatrix} -3-j \\ 1+2j \end{bmatrix}$		
$\begin{bmatrix} 3+j \\ 1+2j \end{bmatrix}$	✓	✓
$\begin{bmatrix} -3-j \\ -1-2j \end{bmatrix}$		

Q. 22

Question 22

Time taken: 13m 10s

The coefficient □ □ can be extracted from the multi-carrier modulated signal as

Response:

OPTIONS	RESPONSE	ANSWER
$f_0 \int_{-\frac{1}{f_0}}^{\frac{1}{f_0}} y(t)e^{-j2\pi l f_0 t}dt$		
$\int_{-\frac{1}{2f_0}}^{\frac{1}{2f_0}} y(t)e^{-j2\pi l f_0 t}dt$	✓	
$f_0 \int_{-\frac{1}{2f_0}}^{\frac{1}{2f_0}} y(t)e^{-j2\pi l f_0 t}dt$		✓
$f_0 \int_{1}^{\frac{1}{2f_0}} x(t)e^{j2\pi l f_0 t}dt$		

Q. 23

Question 23

Time taken: 12m 55s

Consider an OFDM system with number of subcarriers □ = 512 over a bandwidth 10 MHz with 25% CP. The duration of the OFDM symbol, after the addition of the CP, is

Response:

OPTIONS	RESPONSE	ANSWER
25.6 □□		
72.2 □□		
16.8 □□		
64.0 □□	✓	✓

Q. 24

Question 24

Time taken: 18s

Typical coherence bandwidth of the channel is approximately

Response:

OPTIONS	RESPONSE	ANSWER
20 − 30 □□		
200 − 300 □□□		
200 − 300 □□□	✓	✓
20 − 30 □□□		

Q. 25

Question 25

Time taken: 1m 35s

The Gaussian PDF with mean 2 and variance 2 is

Response:

OPTIONS	RESPONSE	ANSWER
$\frac{1}{\sqrt{4\pi}} e^{-\frac{(n-2)^2}{4}}$	✓	✓
$\frac{1}{\sqrt{32\pi}} e^{-\frac{(n-4)^2}{32}}$		
$\frac{1}{\sqrt{8\pi}} e^{-\frac{(n-4)^2}{4}}$		
$\frac{1}{\sqrt{8\pi}} e^{-\frac{(n-4)^2}{8}}$		

Q. 26

Question 26

Time taken: 5m 22s

Consider P = 15 *dB* and $\frac{N0}{2}$ = 6 *dB*. SNR for BPSK modulation is approximately

Response:

OPTIONS	RESPONSE	ANSWER
3 *dB*		
6 *dB*		
9 *dB*	✓	✓
12 *dB*		

Q. 27

Question 27

Time taken: 3m 18s

The SER of QPSK for □□□ = 12 dB is given as

Response:

OPTIONS	RESPONSE	ANSWER
□(4)		
2□(4)	✓	✓
2□($\sqrt{12}$)		
2□(16)		

Q. 28

Question 28

Time taken: 7m 30s

In 256 −QAM the number of bits per in-phase symbol is

Response:

OPTIONS	RESPONSE	ANSWER
8		
16		
256		
4	✓	✓

Q. 29

Question 29

Time taken: 7m 53s

Overall SER of 64 −QAM in a Rayleigh fading wireless channel for □□□ = 147×10^{5} is

Response:

OPTIONS	RESPONSE	ANSWER
10^{-5}		
5×10^{-7}		
2.5×10^{-3}		
2.5×10^{-6}	✓	✓

Q. 30

Question 30

Time taken: 2m 4s

What is the probability of deep fade □ □□ in the Rayleigh fading wireless channel for □□□ = 40 □□?

Response:

OPTIONS	RESPONSE	ANSWER
1 – □ $^{-0.0001}$	✓	✓
1 – □ $^{0.0001}$		
1 – □ $^{-40}$		
1 – □ $^{-0.01}$		

Q. 31

Question 31

Time taken: 2m 9s

Consider the **channel vector**

$$\bar{\mathbf{h}} = \begin{bmatrix} -\sqrt{2} - \sqrt{2}j \\ -\sqrt{2} + \sqrt{2}j \end{bmatrix}$$

If SNR = 9 dB, what is approximate output SNR?

Response:

OPTIONS	RESPONSE	ANSWER
12 *dB*		
15 *dB*		
18 *dB*	✓	✓
21 *dB*		

Q. 32

Question 32

Time taken: 2m 25s

BER for a SIMO system with □ = 2 antennas for □□□ = 27 □□ is given as

Response:

OPTIONS	RESPONSE	ANSWER
3×10^{-6}		✓
2×10^{-4}		
7.5×10^{-8}	✓	
8×10^{-9}		

Q. 33

Question 33

Time taken: 4m 23s

At □ □ = 6 □□□, the minimum antenna spacing required is

Response:

OPTIONS	RESPONSE	ANSWER
0.75 □□		
2.5 □□	✓	✓
5 □□		
1.5 □□		

Q. 34

Question 34

Time taken: 15m 27s

Consider the output vector $\bar{y}$ and MIMO channel $\boldsymbol{H}$ given below and $SNR = -12\,dB$.

$$\bar{\mathbf{y}} = \begin{bmatrix} 2 \\ -3 \\ -1 \\ 2 \end{bmatrix}, \mathbf{H} = \begin{bmatrix} -1 & 1 \\ 1 & 1 \\ -1 & -1 \\ 1 & -1 \end{bmatrix}$$

The LMMSE estimate is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\frac{1}{10}\begin{bmatrix} -6 \\ 3 \end{bmatrix}$		
$-\frac{1}{10}\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	✓	✓
$-\frac{1}{20}\begin{bmatrix} 3 \\ -5 \end{bmatrix}$		
$\begin{bmatrix} -\frac{2}{3} \\ -\frac{1}{3} \end{bmatrix}$		

Q. 35

Question 35

Time taken: 1m 34s

Consider the decomposition below

$$\begin{bmatrix} \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & -\frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} & \frac{1}{2} & \frac{1}{2} \end{bmatrix} \begin{bmatrix} -3 & 0 \\ 0 & -6 \\ 0 & 0 \\ 0 & 0 \end{bmatrix} \begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$$

At the transmitter, we multiply the signal with

Response:

OPTIONS	RESPONSE	ANSWER
$\begin{bmatrix} \frac{1}{2} & -\frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} & \frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & -\frac{1}{2} & \frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \end{bmatrix}$	✓	
$\begin{bmatrix} \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & -\frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} & \frac{1}{2} & \frac{1}{2} \end{bmatrix}$		
$\begin{bmatrix} 0 & 1 \\ 1 & 0 \end{bmatrix}$		✓
$\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$		

Q. 36

Question 36

Time taken: 6m 23s

Consider the MIMO channel with SVD below

$$\begin{bmatrix} \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & -\frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & -\frac{1}{2} & \frac{1}{2} \\ -\frac{1}{2} & \frac{1}{2} & \frac{1}{2} & -\frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} & \frac{1}{2} & \frac{1}{2} \end{bmatrix} \begin{bmatrix} 1 & 0 & 0 \\ 0 & \frac{1}{2\sqrt{2}} & 0 \\ 0 & 0 & \frac{1}{4} \\ 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ 1 & 0 & 0 \end{bmatrix}$$

Let the total power P_T = $12dB$ and noise power N_0 = 0 dB.

Response:

OPTIONS	RESPONSE	ANSWER
$P_1 = \frac{23}{2}, P_2 = \frac{9}{2}, P_3 = 0$		✓
$P_1 = \frac{19}{2}, P_2 = \frac{13}{2}, P_3 = 0$		
$P_1 = 16, P_2 = 0, P_3 = 0$	✓	
$P_1 = \frac{22}{3}, P_2 = \frac{16}{3}, P_3 = \frac{10}{3}$		

Q. 37

Question 37

Time taken: 1m 34s

Consider the channel coefficients □ $_1$ = −1 − 2j, □ $_2$ = 2 − j. The Alamouti matrix is given as

Response:

OPTIONS	RESPONSE	ANSWER
$\begin{bmatrix} -1-2j & 2-j \\ 2-j & 1-2j \end{bmatrix}$		
$\begin{bmatrix} -1-2j & 2-j \\ 2+j & 1+2j \end{bmatrix}$		
$\begin{bmatrix} -1-2j & 2-j \\ 2+j & 1-2j \end{bmatrix}$	✓	✓
$\begin{bmatrix} -1-2j & 2-j \\ 2-j & 1+2j \end{bmatrix}$		

Q. 38

Question 38

Time taken: 9m 21s

Consider bandwidth □ = 20 □□□ and number of subcarriers □ = 500. The sampling rate of the OFDM system is

Response:

OPTIONS	RESPONSE	ANSWER
30 □□□		
40 □□□		
40 □□□	✓	
20 □□□		✓

Q. 39

Question 39

Time taken: 17m 47s

Consider an □ = 4 subcarrier OFDM system with symbols loaded on subcarriers given as □ $_0$ = −2, □ $_1$ = 2□, □ $_2$ = 2, □ $_3$ = 2□ The time-domain sample □(3) is given as

Response:

OPTIONS	RESPONSE	ANSWER
−(1 + □)		
0		
1 − □		
−1	✓	✓

Q. 40

Question 40

Time taken: 5m 52s

Consider a vehicle moving a 36 km per hour at an angle of $\theta = 60^{o}$. The carrier frequency is $f_c = 3.0$ GHz. Compute the coherence time of the channel

Response:

OPTIONS	RESPONSE	ANSWER
2.5 *ms*		
5 *ms*	✓	✓
10 *ms*		
1.5 *ms*		

Test Log

25th Mar 2023

10:02 AM	Started the test with Section #1
10:02 AM	Candidate gave us right to the following feeds - camera : HP TrueVision FHD RGB-IR (064e:3401) - microphone : Default - Headset (Push Active Hands-Free AG Audio) (Bluetooth)
10:03 AM	Additional person there
10:03 AM	Candidate Looking Away from Screen
10:04 AM	Candidate Looking Away from Screen
10:06 AM	Candidate Looking Away from Screen
10:08 AM	Candidate Looking Away from Screen
10:09 AM	Additional person there
10:09 AM	Candidate Looking Away from Screen for 01 min
10:11 AM	Candidate Looking Away from Screen
10:12 AM	Candidate Looking Away from Screen
10:13 AM	Candidate Looking Away from Screen
10:15 AM	Candidate Looking Away from Screen for 01 min
10:17 AM	Away from test window
10:18 AM	Candidate Looking Away from Screen for 04 mins
10:22 AM	Candidate Looking Away from Screen
10:24 AM	Candidate Looking Away from Screen
10:24 AM	Candidate Looking Away from Screen
10:25 AM	Candidate Face not Visible
10:28 AM	Candidate Looking Away from Screen for 01 min
10:32 AM	Candidate Looking Away from Screen for 01 min
10:34 AM	Candidate Looking Away from Screen
10:37 AM	Candidate Looking Away from Screen
10:38 AM	Candidate Looking Away from Screen
10:39 AM	Candidate Looking Away from Screen
10:39 AM	Candidate Looking Away from Screen for 01 min
10:41 AM	Away from test window
10:42 AM	Candidate Looking Away from Screen
10:44 AM	Candidate Looking Away from Screen for 01 min
10:45 AM	Candidate Face Partially Visible
10:46 AM	Candidate Looking Away from Screen
10:46 AM	Candidate Looking Away from Screen
10:47 AM	Candidate Looking Away from Screen

10:48 AM	Candidate Looking Away from Screen
10:50 AM	Candidate Looking Away from Screen
10:52 AM	Additional person there
10:52 AM	Candidate Looking Away from Screen
10:53 AM	Candidate Looking Away from Screen
10:54 AM	Candidate Looking Away from Screen
10:55 AM	Candidate Looking Away from Screen
10:56 AM	Candidate Looking Away from Screen for 01 min
10:58 AM	Candidate Looking Away from Screen
10:59 AM	Candidate Looking Away from Screen
11:01 AM	Candidate Looking Away from Screen for 01 min
11:03 AM	Candidate Looking Away from Screen
11:04 AM	Candidate Looking Away from Screen
11:05 AM	Candidate Looking Away from Screen
11:05 AM	Candidate Looking Away from Screen
11:07 AM	Candidate Looking Away from Screen
11:08 AM	Candidate Looking Away from Screen for 01 min
11:10 AM	Candidate Looking Away from Screen for 01 min
11:12 AM	Candidate Looking Away from Screen
11:13 AM	Candidate Looking Away from Screen
11:14 AM	Candidate Looking Away from Screen for 02 mins
11:18 AM	Candidate Looking Away from Screen for 01 min
11:19 AM	Candidate Looking Away from Screen for 03 mins
11:24 AM	Candidate Looking Away from Screen
11:25 AM	Candidate Looking Away from Screen
11:26 AM	Candidate Looking Away from Screen for 03 mins
11:31 AM	Candidate Looking Away from Screen
11:32 AM	Candidate Looking Away from Screen
11:33 AM	Candidate Looking Away from Screen
11:34 AM	Candidate Looking Away from Screen
11:35 AM	Candidate Looking Away from Screen
11:38 AM	Candidate Looking Away from Screen
11:39 AM	Candidate Looking Away from Screen
11:40 AM	Candidate Looking Away from Screen for 01 min
11:42 AM	Candidate Looking Away from Screen
11:43 AM	Candidate Looking Away from Screen for 01 min
11:44 AM	Candidate Face not Visible
11:44 AM	Candidate Looking Away from Screen for 02 mins

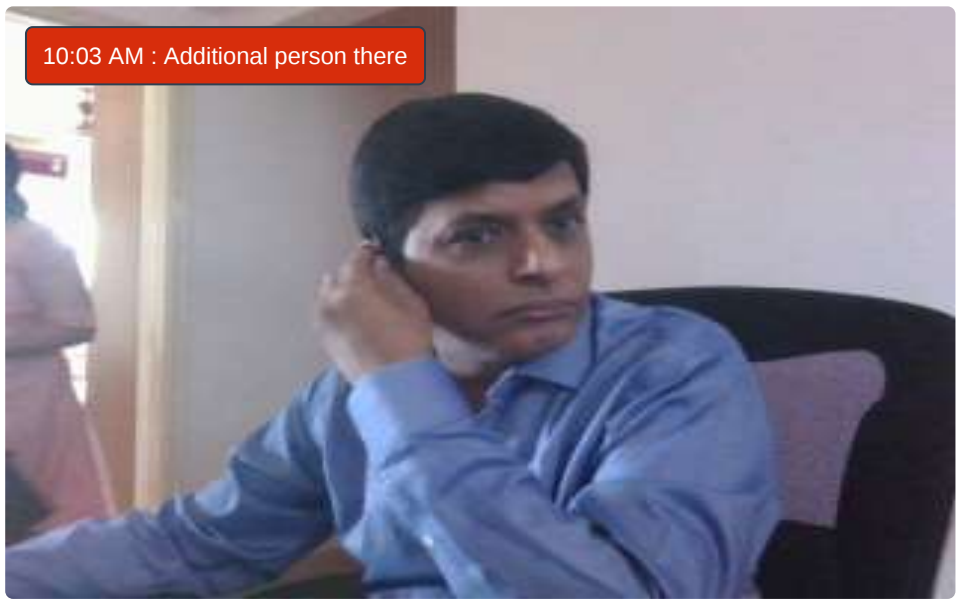
11:47 AM	Candidate Looking Away from Screen for 03 mins
11:51 AM	Candidate Looking Away from Screen
11:52 AM	Candidate Looking Away from Screen
11:53 AM	Candidate Looking Away from Screen for 02 mins
11:55 AM	Away from test window
11:55 AM	Away from test window
11:56 AM	Candidate Looking Away from Screen
11:56 AM	Candidate Looking Away from Screen
11:57 AM	Candidate Looking Away from Screen
11:59 AM	Candidate Looking Away from Screen for 01 min
12:00 PM	Candidate Looking Away from Screen
12:02 PM	Candidate Looking Away from Screen for 02 mins
12:05 PM	Away from test window
12:06 PM	Mobile Phone Detected
12:07 PM	Candidate Looking Away from Screen
12:11 PM	Candidate Looking Away from Screen
12:11 PM	Candidate Looking Away from Screen
12:13 PM	Additional person there
12:18 PM	Candidate Looking Away from Screen
12:21 PM	Candidate Looking Away from Screen
12:22 PM	Candidate Looking Away from Screen
12:26 PM	Candidate Looking Away from Screen
12:32 PM	Candidate Looking Away from Screen
12:33 PM	Candidate Looking Away from Screen
12:39 PM	Candidate Looking Away from Screen
12:39 PM	Finished the test

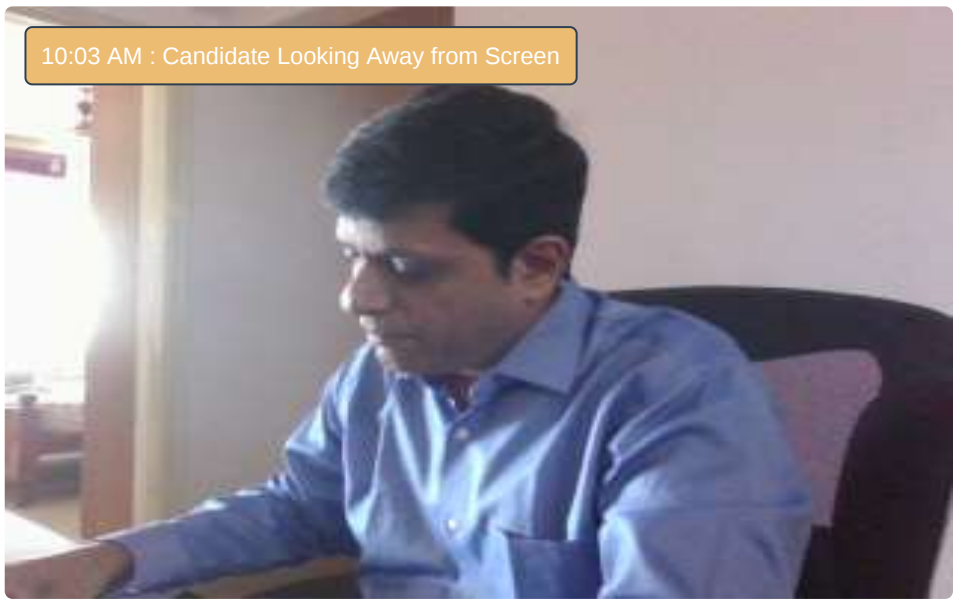
Credibility Index: LOW

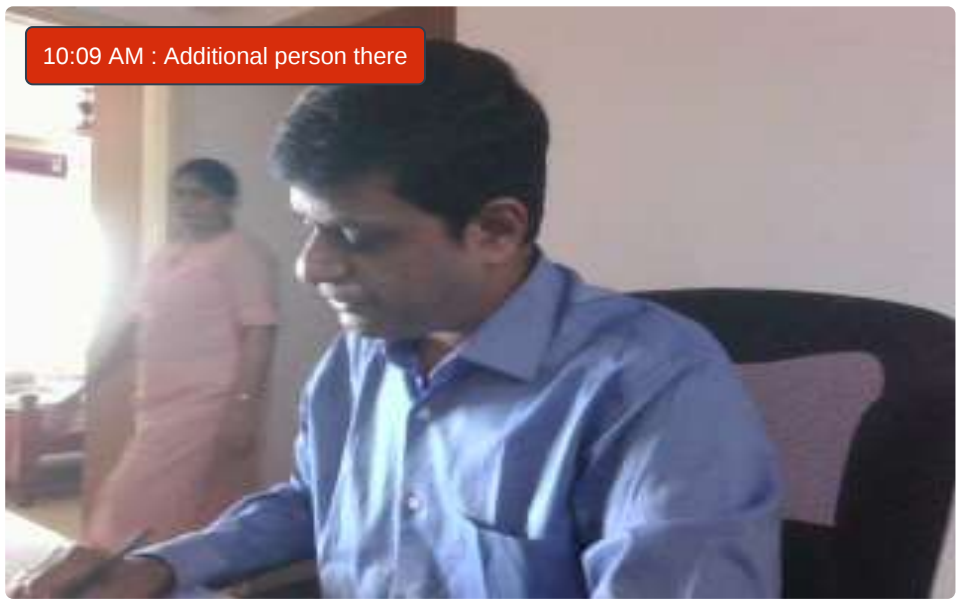
Profile Picture Snapshot

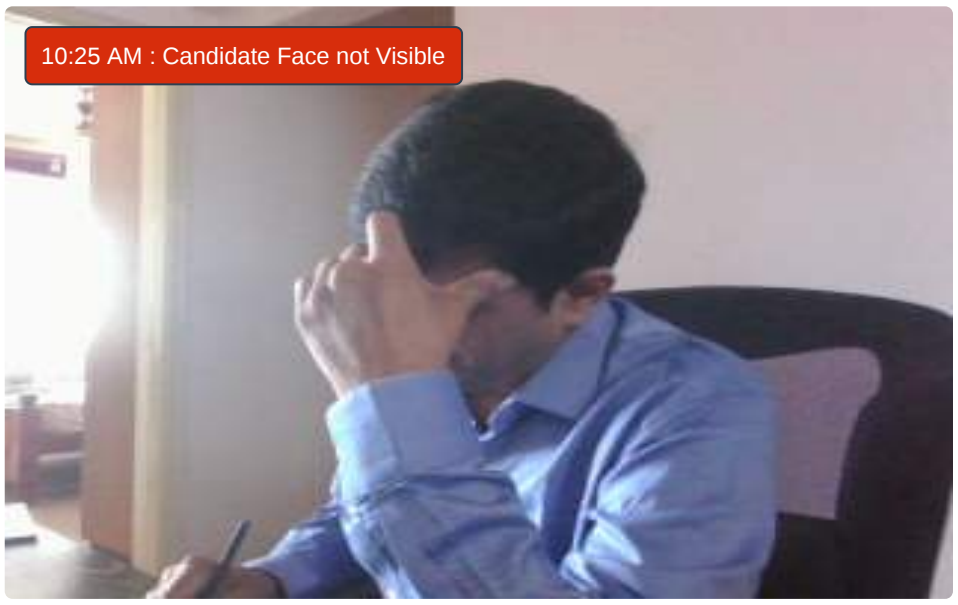
Identity Card Snapshot

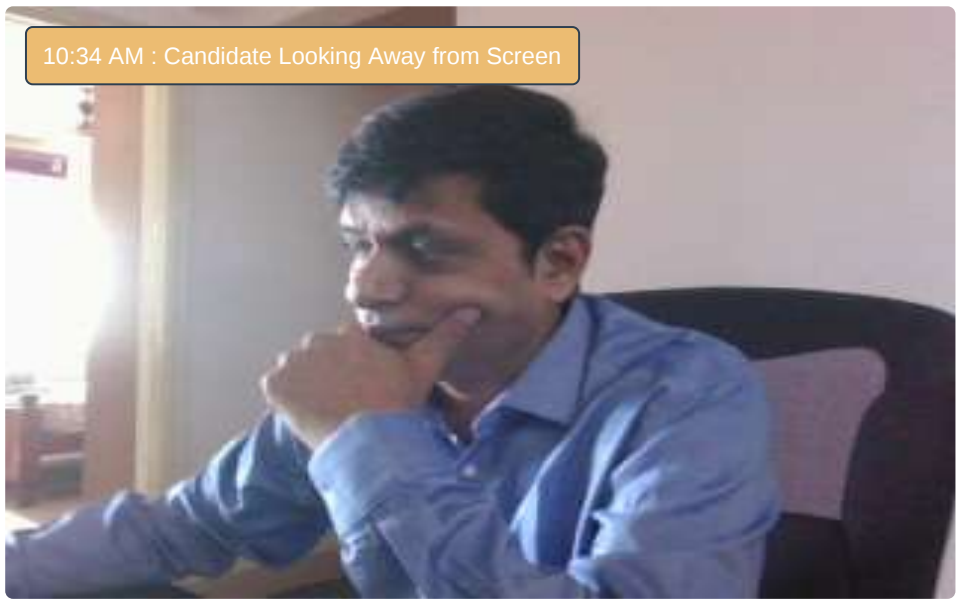
Images of Test-Taker

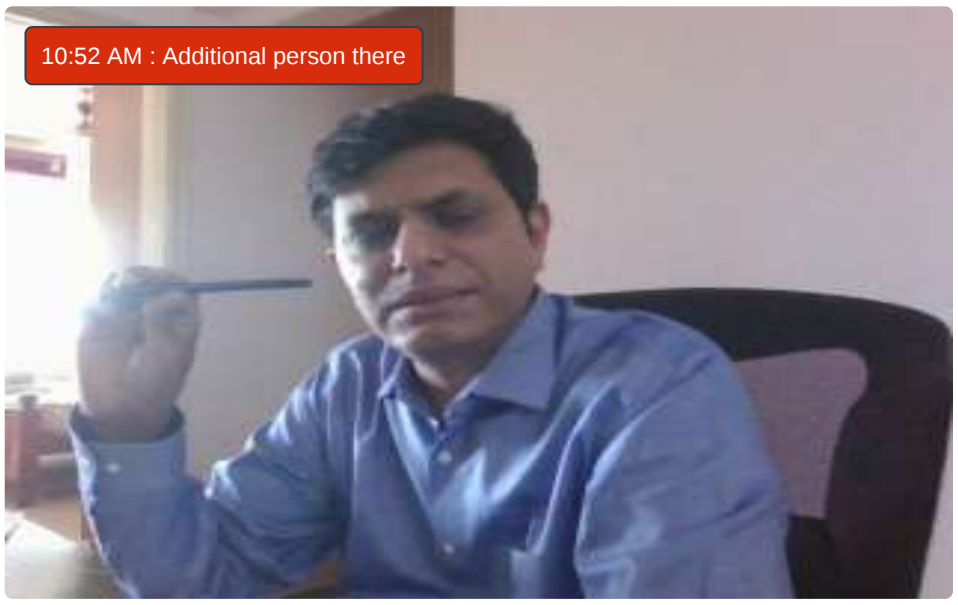


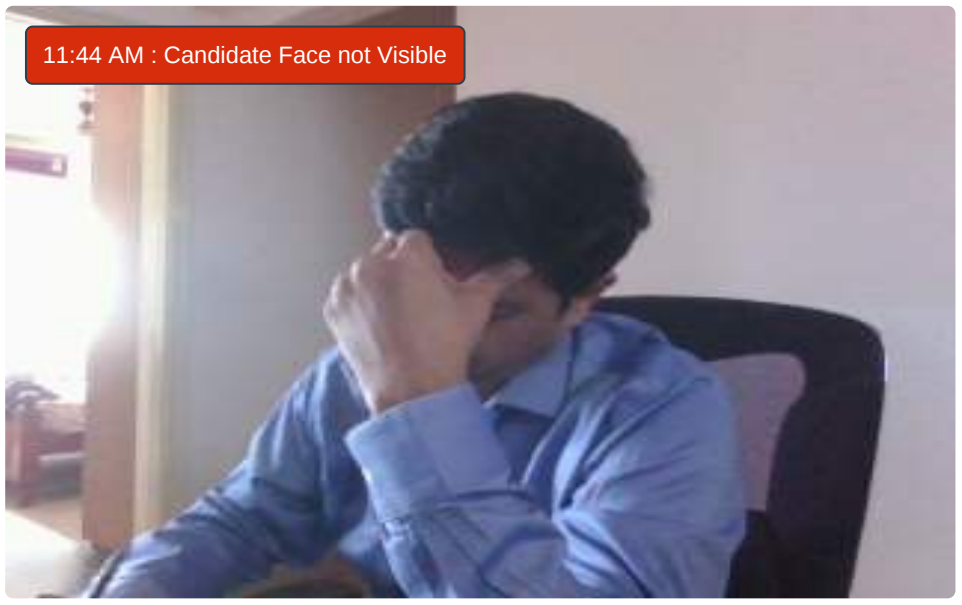


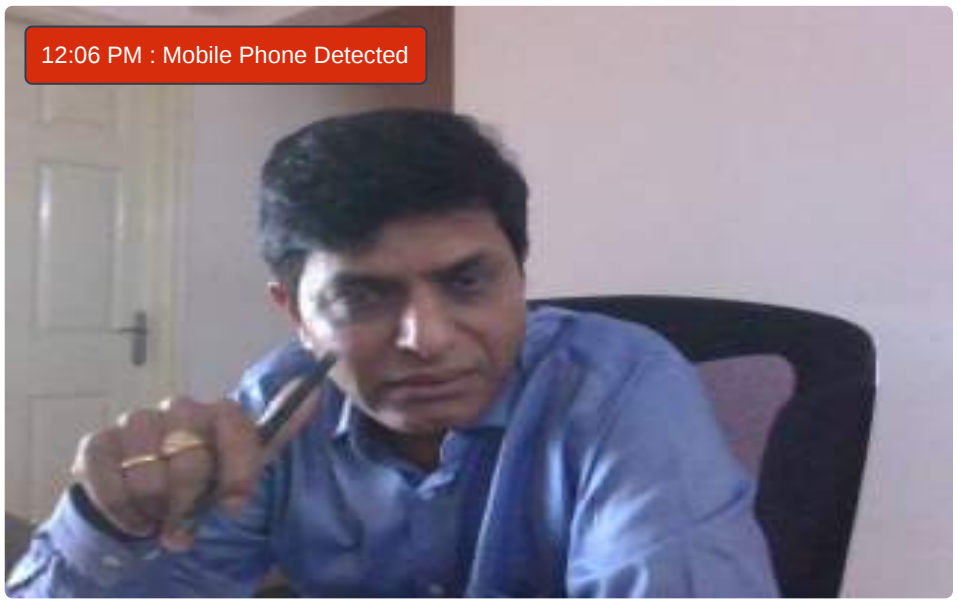


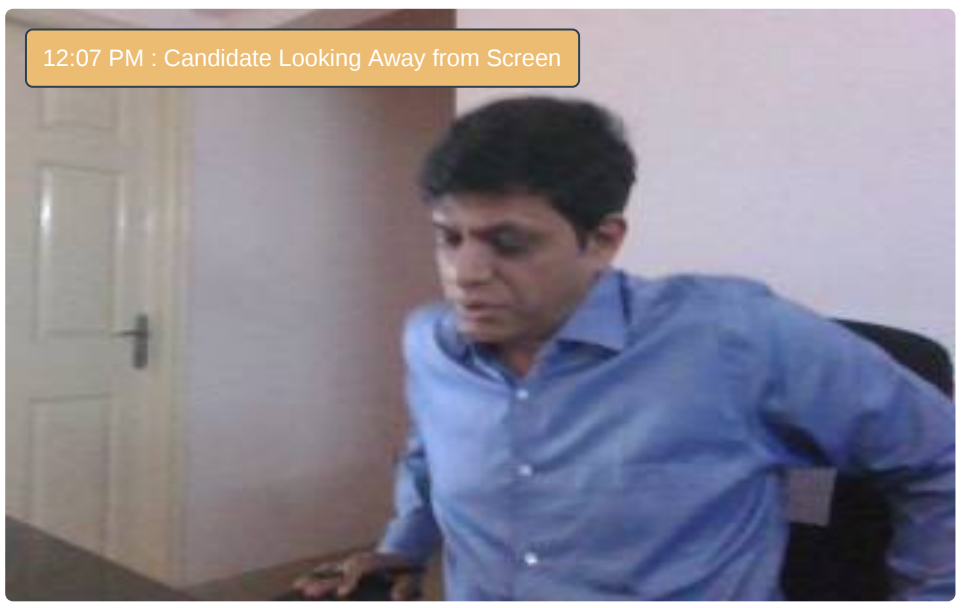


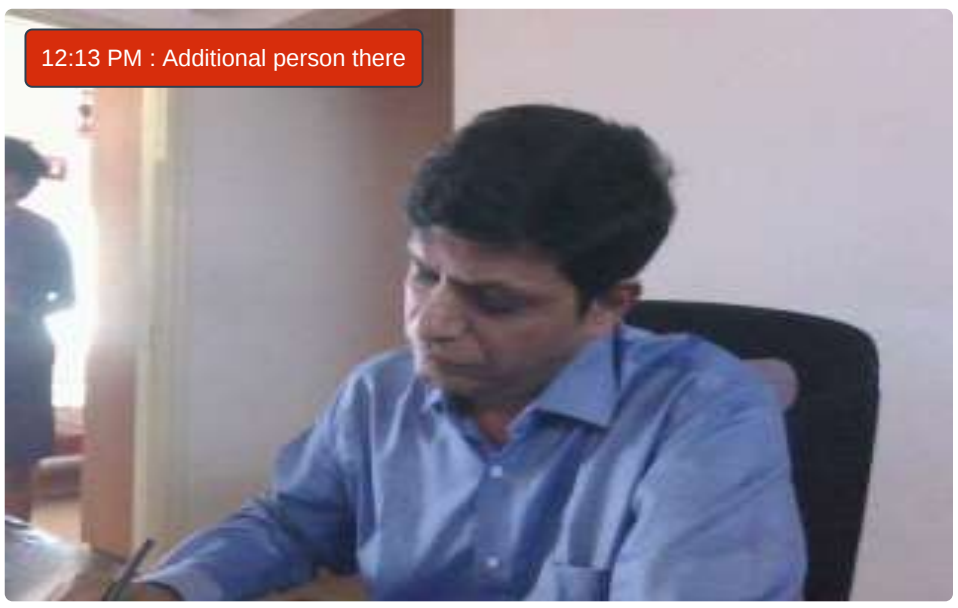





11:44 AM : Candidate Face not Visible


12:06 PM : Mobile Phone Detected


12:07 PM : Candidate Looking Away from Screen


12:13 PM : Additional person there

About the Report

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