

## ANSWER KEY:- CHAPTER – 20

Wave Optics							Level - 1							
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
C	D	B	C	A	C	B	C	A	B	C	B	B	A	C
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
C	B	B	B	D	D	B	D	C	A	D	D	C	D	B
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>45</b>
5	10	100	2.5	51	2	450	1.6	24	500	2	6	3	7	30

Wave Optics							Level - 2							
<b>46</b>	<b>47</b>	<b>48</b>	<b>49</b>	<b>50</b>			<b>51</b>	<b>52</b>	<b>53</b>	<b>54</b>	<b>55</b>	<b>56</b>	<b>57</b>	
B	1	B	3	[A-q] [B-p] [C-p] [D-p]				ABD	AC	5	B	7	D	AB
<b>58</b>	<b>59</b>	<b>60</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>64</b>	<b>65</b>							
A	A	AC	3	ABCD	BC	D	[A-r] [B-r] [C-s] [D-p]							

Wave Optics							JEE Main (Archive)							
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
A	B	C	C	B	D	A	B	D	C	C	C	C	A	C
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>
D	B	B	C	C	C	C	B	B	D	C	None	D	B	C
<b>31</b>	<b>32</b>	<b>33</b>	<b>34</b>	<b>35</b>	<b>36</b>	<b>37</b>	<b>38</b>	<b>39</b>	<b>40</b>	<b>41</b>				
D	D	C	C	B	C	9	C	D	A	750				

Wave Optics										JEE Advanced (Archive)									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
D	C	A	A	B	B	A	B	D	C	C	A	D	B	A					
<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>		<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>		<b>28</b>					
BD	AC	ABC	AB	ABC		BC	BC	A	C	B	13.9	5892		9.3					
<b>29</b>					<b>30</b>					<b>31</b>	<b>32</b>								
(i) $7 \times 10^{-6}$ m	(ii) $1.6, 5.7 \times 10^{-5}$		(i) (4.33nm) (ii) (3/4) (iii) (650, 433.33)							3.5	3								
<b>33</b>				<b>34</b>				<b>35</b>	<b>36</b>	<b>37</b>									
[A-p, s] [B-q] [C-t][D-r, s, t]				$2 \times 10^8$ m/s, 4000Å				2	$\left( \sqrt{\frac{\mu\epsilon}{\mu_0\epsilon_0}} \right)$	(i) (1mm) (ii) (increase)									
<b>38</b>		<b>39</b>	<b>40</b>	<b>41</b>															
$5 \times 10^{14}$ , 4000		True	False	A															