Functional Test Cases

№	Test Case	Steps	Expected Result
1	Register with valid phone number	Enter phone → receive & enter OTP	User successfully registers
2	Register with invalid phone number	Enter invalid phone → submit	Error message is displayed
3	Register with existing phone number	Enter used phone number → submit	Error message is displayed
4	Register with valid email	Enter email → receive & enter OTP	User successfully registers
5	Register with invalid email	Enter invalid email → submit	Error message is displayed
6	Register without entering OTP	Submit without entering OTP	Error message is displayed
7	Register with expired OTP	Wait → enter OTP	Error message is displayed
8	Register with incorrect OTP	Enter wrong OTP → submit	Error message is displayed
9	Login with correct credentials	Enter credentials → Login	User is logged in
10	Login with incorrect password	Enter wrong password → Login	Error message is displayed
11	Login with unregistered email	Enter unregistered email → Login	Error message is displayed
12	Login with unregistered phone number	Enter unregistered phone → Login	Error message is displayed
13	Login with empty fields	Leave login fields empty → submit	Error message is displayed
14	Forgot password functionality	Click "Forgot password" → enter email	Reset link is sent
15	Logout functionality	Click logout	User is logged out
16	Send a text message	Open chat → Type → Send	Message is delivered
17	Send message with emojis	Type emoji → Send	Emoji is displayed correctly
18	Send special characters in message	Type !@#$% → Send	Special chars displayed properly
19	Send message with >1000 characters	Paste long text → Send	Error or wraps correctly
20	Send empty message	Send with empty input	Error message shown
21	Edit a sent message	Long press → Edit → Save	Edited message is shown
22	Delete a sent message	Long press → Delete	Message disappears
23	Send an image	Attach image → Send	Image is displayed
24	Send a video	Attach/record → Send	Video is playable

25	Send a file (PDF, DOC)	Attach file → Send	File is sent successfully
26	Send a sticker	Choose sticker → Send	Sticker is displayed
27	Send a voice message	Hold record → Send	Voice note is sent
28	Forward a message	Long press → Forward	Message is forwarded
29	Reply to a message	Swipe/Reply → Send	Reply links to original
30	Mention user in group chat	Type @name → Send	Mentioned user is notified
31	Send multiple messages quickly	Spam 5+ messages → Check	Messages delivered in order
32	Check read status	Send → Receiver reads	Status updates to "Read"
33	Check delivery status	Send message	Status updates to "Delivered"
34	Typing indicator appears	Type in chat	Typing status is shown
35	Switch between dark/light mode	Settings → Toggle theme	Theme changes instantly
36	Search messages	Open search → Enter keyword	Relevant messages shown
37	Pin a message	Long press → Pin	Message pinned at top
38	Mute a conversation	Mute from chat options	Notifications stop
39	Block a contact	Open profile → Block	Contact can't message
40	Unblock a contact	Go to blocked list → Unblock	Contact can send messages again
41	Check last seen status	Open user profile	Last seen is visible
42	Change chat background	Chat settings → Change background	Background is updated
43	Delete a conversation	Chat options → Delete	Chat history cleared
44	Archive a conversation	Long press chat → Archive	Chat moves to archive
45	Unarchive a conversation	Archive → Long press → Unarchive	Chat returns to list
46	Create group chat	New chat → Select users	Group is created
47	Add member to group	Group settings → Add	Member added
48	Remove member from group	Group settings → Remove	Member removed
49	Assign admin in group	Group settings → Make Admin	Admin rights granted
50	Remove an admin	Group settings → Revoke Admin	Admin rights removed
51	Send message in group	Type message → Send	Delivered to all
52	Send file in group	Attach → Send	File delivered to all
53	Mute group notifications	Group settings → Mute	No notifications received

№	Test Case	Steps	Expected Result
54	Unmute group notifications	Group settings → Unmute	Notifications restored
55	Leave a group	Group options → Leave	User leaves group
56	Delete a group	Group admin → Delete	Group deleted permanently
57	Mention a user in group	@user → Send	User notified
58	Send a poll in group	Create poll → Share	Members can vote
59	React to group message	Long press → React	Reaction displayed
60	Search group chat	Group → Search icon	Messages found
61	Make a voice call	Tap voice call	Call connects
62	Receive a voice call	Accept incoming call	Call connects
63	Decline a voice call	Tap decline	Call is rejected
64	Mute/unmute during call	Tap mute/unmute	Mic toggles
65	Switch to speaker during call	Tap speaker icon	Audio output changes
66	End a call	Tap end	Call ends
67	Make a video call	Tap video call	Video session starts
68	Enable/disable camera during call	Tap camera icon	Camera toggles
69	Switch camera (front/rear)	Tap switch camera	Camera toggles
70	Add participant to call	Tap "Add" → Choose contact	Contact joins call
71	Leave group call	Tap Leave	User exits call
72	Check call history	Open call logs	History shown
73	Block call from user	Block contact	Calls no longer received
74	Record voice call (if supported)	Tap record during call	Audio saved
75	Test call on slow network	Simulate slow network → Call	Call adjusts or handles lag
76	Receive message notification	Send message → check other device	Notification appears
77	Open chat from notification	Tap message notification	Chat opens directly
78	Enable/disable push notifications	Go to Settings → Notifications	Toggle works
79	Change profile picture	Profile → Edit → Upload	Picture is updated

Non-Functional Test Cases

№	Test Case	Steps	Expected Result
80	Change status message	Profile → Update status	Status is saved

81	Change phone number	Settings → Phone → Enter new	Number is updated
82	Change password	Settings → Password → Save	Password changes
83	Enable 2FA	Settings → Security → Enable	2FA is active
84	Logout & login again	Logout → Re-login	Session resumes
85	Delete account	Settings → Delete Account	Account removed permanently
86	Attempt login after deletion	Try login after deleting account	Login fails
87	Blocked user cannot join group	Block user → Try to add in group	Addition blocked
88	Disable auto media download	Settings → Media → Auto-download off	Files not auto-downloaded
89	Battery usage on long call	Place 30-min call	No overheating, acceptable drain
90	Offline message sync	Send message offline → Go online	Message sent on reconnect
91	Multi-device login handling	Login from 2 devices	Session syncs or restricts appropriately

UI Test Cases

№	Test Case	Steps	Expected Result
92	Notification badge count updates	Send multiple messages	Badge count increases
93	Language switch	Settings → Change language	UI updates to selected language
94	Rounded message bubbles	Open chat → Send message	Message bubbles are styled properly
95	Avatar shows correctly in chat list	Send/receive message	User avatars are shown
96	Chat screen aligns properly	Open chat	Text, icons aligned
97	Input field expands correctly with text	Type long message	Field expands or scrolls smoothly
98	Icons are consistent in theme	Switch theme	Icons adapt to light/dark
99	Typing area doesn't overlap with keyboard	Tap input on small screen	Input area stays visible
100	Message timestamps are readable	Send/receive messages	Timestamps are properly styled