Subject:- **Personal Cybersecurity Guidance for Government Officials** (Advisory No. 41)

A document containing cyber security guidelines from Google reiterating social-engineering aspects and mitigation measures are as under:

a. Personal Mobile Phones

- Don't bring smartphone to meeting where most confidential or critical conversation or meeting is happening.
- (2) Disable Bluetooth when not in use; don't pair unknown devices.
- (3) Be Judicious while connecting Public WiFi networks, try to connect with networks which are secure and are personally under your control.
- (4) Ensure usage of strong password; use password manager (if exists) to generate random, unique and strong password generation.
- (5) Ensure that device auto lock policy is applied after 10 consecutive failed password attempts and automatically lock after 5 minutes.
- (6) Avoid software or hardware modifications such as Jailbreaking or rooting.
- (7) Install applications from trusted source.
- (8) Plan a contingency plan in case of loss or theft e.g. Activation of mobile tracking feature "Find My Mobile" and backup storage place (Alternative Digital Device/Cloud) for your data.
- (9) Do not print official documents from home printers or share those on public media/applications or conduct sensitive meetings from home.

b. Personal Machines and Networks

- (1) Upgrade to latest Operating System/Web Browser and keep it updated.
- (2) Use Multi-Factor Authentication whenever possible; most online services provide an option of MFA.

- (3) Leverage security software that provides layered defense via Antivirus, Anti-Phishing, Anti-Malware, Safe Browsing and Firewalls capabilities.
- (4) Disable listening devices when not in use e.g. smartphone microphones, software voice assistants, baby monitors, CCTVs, home cameras etc.
- (5) Use secure networks for official and personal communications by ensuring following:
 - (a) Network Address Translation (NAT) protocol is enabled.
 - (b) Change the default Service Set Identifier (SSID).
 - (c) If the ISP supports IPv6, ensure the router supports IPv6.
 - (d) Disable Universal Plug-n-Play (UPnP).
 - (e) Use strong passphrases of 20 characters to secure network connecting devices.

c. **General Online Safety**

(1) **Email Security**

- (a) Avoid opening attachments or links from unsolicited emails.
- (b) To prevent the reuse of any compromised passwords, use different password for different accounts.
- (c) Always use secure email protocols (Secure IMAP or Secure POP3).
- (d) Never open emails that make unusual claims "offer too good to be true".

(2) Social Media

- (a) Avoid posting personal information such as home address, phone number, CNIC, place of employment and other personal information that can be used to target or harass.
- (b) Limit access of your information to "friends only" and always verify any friend requests outside of social networking.

- (c) Review of security policies and settings available from your social network providers quarterly or when the site's terms of use/policy changes.
- (d) Opt for not exposing personal information to search engines.
- (3) Online Payments. When shopping online, use a virtual card, instead of sharing your actual card number with the merchant. Google creates a virtual number that is shared with merchant to process your transaction.
- (4) Online Services. Meta (Facebook, WhatsApp, Instagram) also provides a set of security tips for government officials available on the link "https://www.facebook.com/gpa/resources/basics/security".