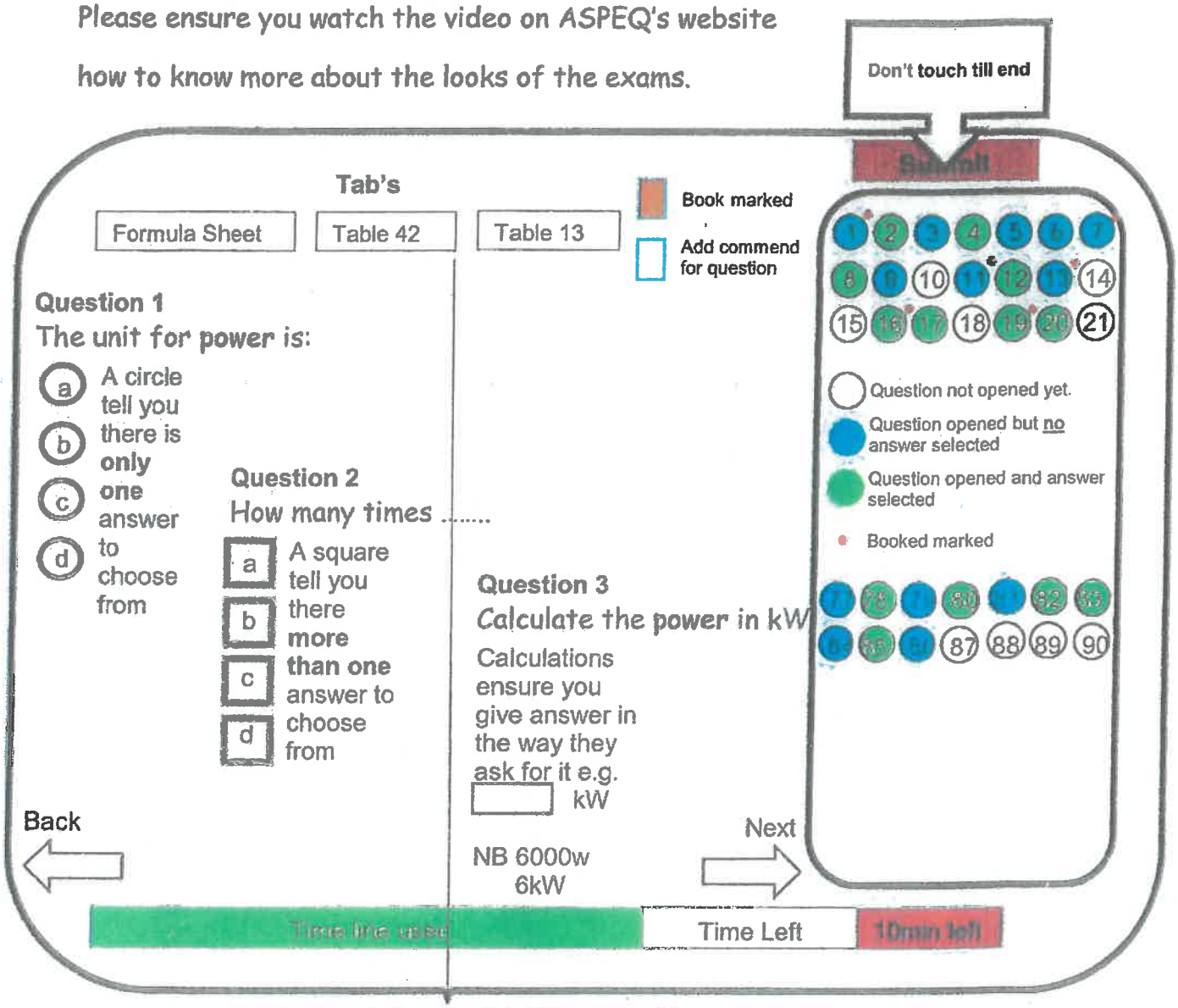
How your exam screen can look like

Please ensure you watch the video on ASPEQ's website how to know more about the looks of the exams.



When a tab is opened it's either a picture of a PDF document

- If it's a PDF you can click Control F and you can search certain words.
- If it's a picture you need to read the words.
- It normally covers you whole screen.

Please not to close this attachment you need to scroll to the bottom of this page and then at the bottom there is a x to click to close.

X Close

aspeq
assessment specialists

Formulae Sheet for EWRB examinations

For examination use only

$$V = IZ \qquad I = \frac{V}{Z}$$

Star:

$$I_L = I_{ph} \qquad V_p = \frac{V_L}{\sqrt{3}}$$

Delta:

$$V_L = V_{ph} \qquad I_p = \frac{I_L}{\sqrt{3}}$$

$$\%Z = \frac{S_{rating}}{S_{fault}} \times 100$$

$$P_{out} = \frac{2\pi NT}{60}$$

$$\eta = \frac{P_{out}}{P_{in}} \times 100\%$$

$$Tan\phi = \frac{opp}{adj}$$

Series: $\frac{1}{C_T} = \frac{1}{C_1} + \frac{1}{C_2}$

Parallel: $C_T = C_1 + C_2$

$$X_C = \frac{1}{2\pi fC} \qquad X_L = 2\pi fL$$

$$Z^2 = R^2 + (X_L - X_C)^2$$

$$Z = R \pm jX$$

$$Q = \frac{V^2}{X_C}$$

$$Q = VI\sin\theta$$

$$Q_C = P(\tan\phi_1 - \tan\phi_2)$$

$$\%\eta = \frac{nS\cos\phi}{nS\cos\phi + n^2P_{Cu} + P_{Fe}} \times 100$$

$$N_S = \frac{60f}{p}$$

$$\omega = \frac{2\pi N}{60}$$

$$Sin\phi = \frac{opp}{hyp}$$

$$Q = CV \qquad R = \frac{\rho l}{A}$$

$$P = VI\cos\theta$$

$$P = I^2R$$

$$P_{delta} = 3P_{star}$$

$$Pf = \cos\theta = \frac{P}{S}$$

$$P = \sqrt{3}V_L I_L \cos\theta$$

$$P = 3V_{ph} I_{ph} \cos\theta$$

$$S = \sqrt{P^2 + Q^2}$$

$$S = \sqrt{3}V_L I_L$$

$$S = VI$$

$$\frac{N_1}{N_2} = \frac{V_1}{V_2} = \frac{I_2}{I_1}$$

$$\%Slip = \frac{N_S - N_R}{N_S} \times 100$$

Insulation Resistance

$$R_2 = \frac{L_2 R_1}{L_2}$$

$$Cos\phi = \frac{adj}{hyp}$$

$$\%Regulation = \frac{V_{NL} - V_{FL}}{V_{NL}} \times 100$$

$$I_{neutral} = \sqrt{(I_R^2 + I_B^2 + I_C^2) - (I_a I_b) - (I_b I_c) - (I_a I_c)}$$