Student Name:	Medical School:	Year:			
Blood Transfusion Please answer the following questions regarding blood transfusion, cross matching and post procedure care and treatment.		Self	Peer	Peer/ Tutor	Tutor
Understands clinical indications for Red Cell Transfusion And can name at least 3	Acute blood loss (especially if > 1.5 L in an adult) Symptomatic anaemia with no easily treatable cause (e.g. treat Fe deficiency anaemia with Fe); Long term transfusion dependant anaemia Radiotherapy patient (Hb <110g/L) Chemotherapy patient (Hb <90g/L)	☐	☐	☐	☐
Name the UK independent, professionally-led haemovigilance scheme	SHOT – (Serious Hazards of Transfusion) - collects and analyses anonymised information on adverse events and reactions in blood transfusion.	☐	☐	☐	☐
Name errors that are known to occur	WBIT (Wrong Blood in Tube) A patient has a sample of blood taken unnecessarily when the blood should have been from another patient, caused by failure to identify patient correctly Failure in communication	☐	☐	☐	☐
What is pre-transfusion sample requirement **BCSH = British Committee for standards in Haematology**	BCSH Guidelines (2012) recommend that at least 2 separate samples are processed pre transfusion prior to release of blood components (single samples may be used in acute situations e.g. trauma). This MUST be from 2 distinct phlebotomy episodes and NOT 2 samples taken AND LABELLED at the same time, and should be by 2 different clinicians. Providing a second sample is an important patient safety method and significantly reduces the risk of an ABO incompatible transfusion	☐	☐	☐	☐
Explanation to patient and obtains valid consent **SABTO (Safety of Blood, Tissues and Organs) made the following recommendations to the DoH**	Verbal & written consent when patient has capacity Valid consent for actual or potential blood transfusion should be obtained and documented in the patient's clinical record or on the adult blood transfusion pathway. A standardised information resource must be available for clinicians listing key issues to be discussed when obtaining valid consent from a patient for a blood transfusion. Patients who have received a blood transfusion in their best interests and who were not able to give valid consent prior to the transfusion should be provided with information retrospectively. Any transfusions must also be documented in the discharge letter to the GP.	☐	☐	☐	☐
Patient ID	The patient MUST be positively identified at all times. There are no exceptions.	☐	☐	☐	☐
Minimum requirements on blood specimen sample tube ALL correctly spelt	Patient surname Patient forename Date of birth (not age or year of birth) Hospital number (The NHS number is only acceptable for antenatal/CRM samples) Gender (and/or on the request form) Collector's details Date and Time specimen collected	☐	☐	☐	☐
Prescription & cannula size	Elective transfusions - blood must be prescribed over no greater than 3 hours 30 minutes. All blood components can be slowly infused through small bore cannula or butterfly needles e.g. 20G, (pink). For rapid infusion, large bore cannula e.g. 14G or 16G (orange or grey)	☐	☐	☐	☐
Patient monitoring during transfusion **What vital signs -**	15 minutes prior to transfusion of each unit or blood 15 minutes following commencement of the transfusion On completion of the infusion of each unit of blood Temperature, pulse, respiratory rate, blood pressure, oxygen saturations Patients receiving transfusion should be in a visible bed space	☐	☐	☐	☐

Symptoms patient should be informed to report during or after transfusion	Feeling that something is wrong, or being unwell in any way Flushing, or feeling hot and bothered, acute rash, Shivering or shaking, Progressive agitation Pain at the cannula site, Shortness of breath Acute diarrhoea or sudden vomiting, passing red urine Severe pain especially loin/lower back area, abdomen or chest If transfused as outpatient - advise that reactions can occur up to 24 hours post transfusion and should they feel unwell – seek medical help and mention the transfusion	☐	☐	☐	☐
Complications and adverse effects that can occur **Report ALL transfusion reactions to blood bank / report via DATIX**	**Adverse Effect** — **Basic Management** **Fluid Overload** — **(TACO) Stop** transfusion – seek advice - give 100% O2, diuretic (furosemide 40mg IV), monitor and consider CXR **Allergic Reaction** — **Stop** transfusion – seek advice - give chlorpeniramine and monitor closely **Anaphylaxis** — **Stop** transfusion – maintain airway, O2, contact anaesthetist, give IM adrenaline, repeat dose after 5 mins and give IV fluid bolus if ABC problems persist. **Acute Haemolytic reaction** — **Stop** transfusion – check ID of patient and label on blood unit, inform haematologist. Send unit and FBC, U&E, clotting, cultures & urine to lab. Treat DIC **Non-Haemolytic Reaction** — **Stop** transfusion – give paracetamol, monitor – if no improvement inform senior. **Transfusion Related Acute Lung Injury** — **(TRALI) Stop** transfusion – give 100% O2, treat as ARDS – donor should be removed from donor panel.	☐	☐	☐	☐
Procedure **Ensure the following correspond –**	All staff involved MUST have received in-hospital training. Confirm blood has been prescribed and written consent gained When a patient cannot give valid consent, the consultant in charge must act in the patient's best interests Ensure the patient has received a 'Blood Transfusion' Patient information leaflet. Ensure one full set of observations are done no more than 15 minutes prior to commencement of transfusion. Check the cannula for patency, security, no signs of infection Only remove one unit of blood at a time from blood bank In the clinical area, the blood MUST be checked by 2 clinicians Check the compatibility tag and the unit of blood to be infused against the black cross match slip using local systems e.g. autofate: The patient's surname, the patient's forenames, date of birth Hospital number, gender, patient blood group, donor blood group, blood unit number, expiry date Check the integrity and content of the bag of blood with particular reference to: expiry date, Integrity of the pack, discoloration or clouding, presence of clot(s) or any foreign particles, Integrity of all ports The final identity check must be done next to the patient by matching the blood pack with the patient's wristband adhering to local policy (verbal + wristband + blood pack	☐	☐	☐	☐
Self-assessed as at least borderline:	Signature: Date:				
Tutor assessed as satisfactory:	Signature: Date:				
Notes					

F = Fail B=borderline P= Pass G = Good E= Excellent