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Competency Table

Number	Competency The student should be able to:	Core (Y/N	Suggested Teaching Learning method	Suggested Assessment method	Chapter Number	Page Number
SECTION 1: Hematology						
PY2.11	Estimate Hb, RBC, TLC, RBC indices, DLC, Blood groups, BT/CT	Y	DOAP sessions	Practical/OSPE/ Viva voce	1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 1.11	21, 27, 32, 40, 57, 60, 71
PY2.12	Describe test for ESR, Osmotic fragility, Hematocrit. Note the findings and interpret the test results, etc.	Y	Demonstration	Written/ Viva voce	1.8, 1.16	51, 90
PY2.13	Describe steps for reticulocyte and platelet count	Y	Demonstration sessions	Written/ Viva voce	1.12, 1.15	79, 88
SECTION 2: Human Experiments						
PY6.8	Demonstrate the correct technique to perform and interpret Spirometry	Y	DOAP sessions	Skill assessment/ Viva voce	2.2, 2.3	106, 115
PY11.14	Demonstrate basic life support in a simulated environment	Y	DOAP sessions	OSCE	2.4	119
PY5.16	Record arterial pulse tracing using finger plethysmography in a volunteer or simulated environment	N	DOAP sessions, Computer assisted learning methods	Practical/OSPE/ Viva voce	2.5	124
PY5.12	Record blood pressure and pulse at rest and in different grades of exercise and postures in a volunteer or simulated environment	Y	DOAP sessions	Practical/OSPE/ Viva voce	2.6, 2.7, 2.8	127, 137, 140
PY3.15	Demonstrate effect of mild, moderate and severe exercise and record changes in cardiorespiratory parameters	Y	DOAP sessions	Practical/OSPE/ Viva voce	2.8	140
PY5.13	Record and interpret normal ECG in a volunteer or simulated environment	Y	DOAP sessions	Practical/OSPE/ Viva voce	2.9	143
PY3.16	Demonstrate Harvard step test and describe the impact on induced physiologic parameters in a simulated environment	Y	DOAP sessions	Practical/OSPE/ Viva voce	2.10	151
PY10.20	Demonstrate (i) Testing of visual acuity, color and field of vision, and (ii) Hearing, (iii) Testing for smell, and (iv) Taste sensation in volunteer/simulated environment	Y	DOAP sessions	Skill assessment/ Viva voce	2.11, 2.13, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25	154, 158, 160, 163, 164, 169, 170, 171
PY10.12	Identify normal EEG forms	Y	Small group teaching	OSPE/Viva voce	2.26	172
PY9.9	Interpret a normal semen analysis report including (a) Sperm count, (b) Sperm morphology, and (c) Sperm motility, as per WHO guidelines and discuss the results	Y	Lecture, Small group discussion	OSPE/Viva voce	2.30	191

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Number	Competency The student should be able to:	Core (Y/N	Suggested Teaching Learning method	Suggested Assessment method	Chapter Number	Page Number
PY9.10	Discuss the physiological basis of various pregnancy tests	Y	Lecture, Small group discussion	Written/ Viva voce	2.31	193
PY9.6	Enumerate the contraceptive methods for male and female. Discuss their advantages and disadvantages	Y	Lecture, Small group discussion	Written/ Viva voce	2.32	195
SECTION 3: Clinical Examination						
PY11.13	Obtain history and perform general examination in the volunteer / simulated environment	Y	DOAP sessions	Skill assessment/ Viva voce	3.1	199
PY6.9	Demonstrate the correct clinical examination of the respiratory system in a normal volunteer or simulated environment	Y	DOAP sessions	Skill assessment/ Viva voce/OSCE	3.2	203
PY5.15	Demonstrate the correct clinical examination of the cardiovascular system in a normal volunteer or simulated environment	Y	DOAP sessions	Practical/OSPE/ Viva voce	3.3	209
PY4.10	Demonstrate the correct clinical examination of the abdomen in a normal volunteer or simulated environment	Y	DOAP session	Skill assessment/ Viva voce/OSCE	3.4	214
PY10.11	Demonstrate the correct clinical examination of the nervous system: Higher functions, sensory system, motor system, reflexes, cranial nerves in a normal volunteer or simulated environment	Y	DOAP sessions	Skill assessment/ Viva voce/OSCE	3.5	218
SECTION 4: Experimental Physiology						
PY3.18	Observe with computer assisted learning (i) amphibian nerve—muscle experiments, (ii) amphibian cardiac experiments	Y	Demonstration, Computer assisted learning methods	Practical/ Viva voce	4.1–4.18	249–295

LIST OF PRACTICALS REQUIRING CERTIFICATION

Number	Competency The student should be able to:	Chapter Number	Page Number
PY5.12	Record pulse and blood pressure at rest in a volunteer	2.6	127
PY5.12	Record pulse and blood pressure in a volunteer in different grades of exercise.	2.8	140
PY5.12	Record pulse and blood pressure in a volunteer during change of posture	2.7	137
PY6.9	Demonstrate the correct clinical examination of respiratory system in a normal volunteer or simulated environment.	3.2	203
PY10.11	Demonstrate the correct clinical examination of higher function of nervous system in a normal volunteer or simulated environment.	3.5	218
PY10.11	Demonstrate the correct clinical examination of sensory system in a normal volunteer or simulated environment.	3.5	241
PY10.11	Demonstrate the correct clinical examination of motor system in a normal volunteer or simulated environment.	3.5	228

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Number	Competency The student should be able to:	Chapter Number	Page Number
PY10.11	Demonstrate the correct clinical examination of reflexes in a normal volunteer or simulated environment.	3.5	233
PY10.11	Demonstrate the correct clinical examination of cranial nerves in a normal volunteer or simulated environment	3.5	219
PY10.20	Demonstrate the correct clinical examination of visual acuity, color and field of vision in a normal volunteer or simulated environment	2.11, 2.13, 2.19, 2.20	154, 158, 160, 163
PY10.20	Demonstrate hearing tests in a normal volunteer or simulated environment	2.21, 2.22, 2.23	164, 169, 169
PY10.20	Demonstrate test of smell in a normal volunteer or simulated environment	2.25	171
PY10.20	Demonstrate taste sensation in a normal volunteer or simulated environment	2.24	170

*OSCE:Objective Structured Clinical Examination
OSPE: Objective Structured Practical Examination
DOAP: Demonstrate, Observe, Assess, Perform.