

CBAT-PC-PNDT-2023-SET-1-A

Time: 2 Hours

<u>Section-A</u> : 50 MCQs of one mark each	=	50 Marks
<u>Section-B</u> : 10 Short Questions with five marks each	=	50 Marks
Total Marks	=	100 Marks

Roll No. (in figures) .....

(in words).....

.....  
 (Signature of Candidate)

I have checked the entries made above and in the OMR Sheet by the candidate.

.....  
 (Signature of Invigilator)

**CANDIDATES MUST READ THE FOLLOWING INFORMATION / INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.**

1. All the candidates must return the test booklet as well as answer-sheet to the Invigilator concerned before leaving the Examination Hall. If any candidate leaves the examination hall without handing over the test booklet / answer sheet to the Invigilator, a case of use of unfair means/ misbehavior will be registered against him/her in addition to lodging an FIR with the Police. The answer-sheet of such a candidate will not be evaluated.
2. The candidates must not do any rough work or writing work in the answer-sheet (OMR Sheet). All rough work is to be done in the test booklet.
3. Candidates will be required to darken the circle by using **blue/ black ball point pen** only.
4. Books, papers, slide rule, log table, cellular phone, pager, calculator or any other electronic gadget etc. are not allowed in the Examination Hall.
5. **BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED THE CORRECT AND COMPLETE TEST BOOKLET CONTAINING (SECTION – A : 1 TO 50 MCQs AND SECTION-B : 1 TO 10 SHORT QUESTIONS), COMPLAINTS REGARDING MISPRINT ETC. WILL NOT BE ENTERTAINED 10 MINUTES AFTER THE EXAMINATION GETS STARTED.**

SECTION-A

1. Which is not echogenic while doing ultrasonography?  
A. Blood  
B. Gas  
C. Bone  
D. Gall stones
2. Heterotopic pregnancy is a condition in which—  
A. Intrauterine pregnancy coexist with ectopic pregnancy  
B. Twin ectopic pregnancy  
C. Two intrauterine gestational sacs  
D. None of the above
3. In blighted ovum:  
A. Gestational sac and embryo are both formed.  
B. Gestational sac is formed but embryo does not form.  
C. Gestational sac, yolk sac and embryo are formed  
D. None of the above
4. In an antenatal USG, triple bubble sign is seen in :  
A. Duodenal atresia  
B. Pyloric Stenosis  
C. Esophageal atresia  
D. Jejunal Atresia
5. The placenta is considered too thick when it measures:  
A. 4 mm  
B. 3.5 mm  
C. 4 cm  
D. 3.5 cm
6. Which of the following structures out of the following is seen earliest on USG:  
A. Yolk Sac  
B. Fetal Heart  
C. Placenta  
D. Embryo
7. Optimal time of assessment of nuchal translucency is :  
A. 6-12 weeks  
B. 4- 5 weeks  
C. 14-16 weeks  
D. 11-14 weeks
8. Which mode should be used in USG for fetal heart rate measurement?  
A. A- mode  
B. B- mode  
C. M-mode  
D. C- mode
9. All are the signs of follicular rupture on sonography except:  
A. Sudden regression in size of follicle.  
B. Fluid in Pouch of Douglas  
C. Irregular margins of follicle  
D. Increase in number of follicles
10. Which of the following is NOT a component of biophysical profile  
A. Fetal breathing movements  
B. Fetal movements  
C. Fetal tone  
D. Placental maturity

11. Sonographic diagnosis of fetal demise is made when cardiac activity not seen in embryo  
A. More than 4 mm  
B. More than 5 mm  
C. More than 6 mm  
D. More than 7 mm
12. The form which is mandatory to be filled by the USG clinic before USG in pregnant women ?  
A. A form  
B. B form  
C. F form  
D. D form
13. When the inferior placental edge is within 2 cm of internal Os on ultrasonography, it is termed  
A. Placenta previa  
B. Anterior placenta  
C. Low lying placenta  
D. Marginal placenta previa
14. Normal shape of cerebellum is  
A. Dumb bell shaped  
B. Banana shaped  
C. Strawberry shaped  
D. Clover leaf shaped
15. The normal growth rate of mean sac diameter (MSD) is  
A. 1 mm/day  
B. 1.1 mm/day  
C. 1.3 mm/day  
D. 1.5 mm/day
16. In fetal head sonography, banana sign and lemon sign are seen in  
A. Chiari II malformation  
B. Holoprosencephaly  
C. Dandy Walker malformation  
D. Hydrancephaly
17. During fetal asphyxia the diastolic flow in the middle cerebral artery  
A. Increases  
B. Decreases  
C. Reverses  
D. Remains normal
18. Pseudokidney sign is seen in  
A. Gut wall thickening  
B. Intussusception  
C. Midgut malrotation  
D. All of the above
19. Compression sonography is used in diagnosing  
A. Acute cholecystitis  
B. Acute pancreatitis  
C. Acute pyelonephritis  
D. Acute appendicitis
20. If a postmenopausal female presents with bleeding per vagina, then endometrial biopsy is required if on ultrasound the endometrial thickening is more than  
A. 3 mm  
B. 5 mm  
C. 6 mm  
D. 8 mm
21. The harmful effect of Diagnostic ultrasound is  
A. Ionizing radiation  
B. Bowel perforation  
C. Both A & B  
D. None of the above

22. As per current rules, the Application Fee for Registration of an Ultrasound Clinic or Imaging Centre under the PC-PNDT Rules is  
A. Rs.20000/- B. Rs.25000/-  
C. Rs.35000/- D. Rs.50000/-
23. Ultrasound jelly is used in Ultrasonography to  
A. Reduce burning sensation  
B. Protect the probe  
C. Reduce friction on the skin surface  
D. Remove air between the probe and skin
24. In an Ultrasound Probe, Ultrasound waves are produced by  
A. Matrix elements B. Piezoelectric crystals  
C. Oscillating plates D. Rotary system
25. Free peritoneal fluid is normally best visualized in the supine position in  
A. The right paracolic gutter B. The left paracolic gutter  
C. The hepato-renal pouch D. The peripancreatic region
26. The commonest site for an obstructing calculus causing hydronephrosis is  
A. Major calyx B. Pelvi-ureteric junction  
C. Vesico-ureteric junction D. Minor calyx
27. Uterine artery doppler is used in screening of  
A. Aneuploidy B. Preeclampsia  
C. Cervical length D. Congenital malformations
28. Every certificate of registration shall be valid for a period of how many years from the date of its issue.  
A. 5 yrs B. 10 yrs  
C. 6 months D. Forever
29. All records for PCPNDT F form need to be kept for?  
A. 10 years B. 2 years  
C. Lifelong D. 5 years
30. Raised nuchal fold needs invasive testing , if it is more than ?  
A. 3.5 mm B. 5 mm  
C. 1.5 mm D. 2 mm
31. Cervical length of <25 mm in high risk pregnancies for preterm birth should be screened at which gestation?  
A. 16 to 24 weeks B. 30 weeks  
C. 36 weeks D. 12 weeks
32. All are causes of placentomegaly EXCEPT  
A. Maternal diabetes B. Severe maternal anemia  
C. Maternal obesity D. Immune hydrops

33. What is the principal posterior acoustic feature evident in cystic lesions?  
A. Acoustic shadowing artefact                      B. Comet tail artefact  
C. Drop out artefact                                      D. Acoustic enhancement
34. Fat fluid layering appearance is seen in  
A. Mature cystic teratoma                              B. Renal calculi  
C. Vesical calculi                                        D. Ovarian torsion
35. Sonographic measurements taken between the outer edge of the occipital bone to the outer margin of the skin is called  
A. Nuchal fold    B. Nuchal translucency  
C. Cisterna magna                                        D. Orbital distance
36. What is the normal thickness of GB wall?  
A. 15 mm    B. 30 mm  
C. 3 mm    D. 5 mm
37. Lying down adrenal sign is seen in  
A. Renal agenesis                                        B. Renal ectopia  
C. Adrenal hemorrhage                                      D. Multicystic Dysplastic kidney
38. Frank ventriculomegaly in fetal sonography is defined when ventricular atrial diameter is  
A. > 10mm    B. > 12mm  
C. > 13 mm    D. > 15mm
39. The sonographic features of Mirizzi syndrome is  
A. Dilated CBD    B. Calculus in lower end of CBD  
C. Dilated intrahepatic bile ducts                                      D. All of the above
40. On sonography the kidneys with acute pyelonephritis may appear  
A. Normal    B. Enlarged  
C. Altered echotexture                                      D. All of the above
41. Which artefact is used to diagnose Gall stones  
A. Mirror artefact    B. Acoustic shadowing artefact  
C. Acoustic enhancement artefact                                      D. Side lobe artefact
42. e FAST scan can determine  
A. Blood in the peritoneal cavity                                      B. Blood in the pleural cavity  
C. Both of the above                                        D. None of the above
43. In an abdominal sonography, we advise the patient to have full bladder because-  
A. To increase the water content of the body  
B. To have good acoustic window  
C. To increase the impedance  
D. To give comfort to the patient

44. In abdominal scanning, a high frequency probe will be best suited to visualize the  
A. Anterior abdominal wall                      B. Liver  
C. Aorta    D. Adrenals
45. Trilaminar appearance of the endometrial complex is seen in  
A. Menstrual phase                                B. Proliferative phase  
C. Secretory phase                                D. Post-menopausal
46. Small quantity of fluid in the Pouch of Douglas is normally seen during  
A. Menstruation                                B. Proliferative phase  
C. Mid-cycle                                        D. Secretory phase
47. AFI is measured in  
A. 3 Quadrants                                    B. 4 Quadrants  
C. 6 Quadrants                                    D. 8 Quadrants
48. For accurate measurement of the BPD and AC, the image of the head should include the following structures  
A. Thalami and Cerebellum  
B. Cerebral and cerebellar hemispheres  
C. Cavum Septum Pellucidum and Cerebellum  
D. Cavum Septum Pellucidum and Thalami
49. In the normal kidneys  
A. The cortex and medulla are iso-echoic  
B. The cortex and medulla are hyperechoic compared to the renal sinus  
C. The cortex is hypoechoic compared to the medulla  
D. The cortex is hyperechoic compared to the medulla
50. The normal pancreas shows  
A. Homogeneously echogenic parenchyma  
B. Homogeneously hypoechoic parenchyma  
C. Mottled parenchyma  
D. Reticular pattern of parenchyma

SECTION-B

Short Questions

Q. 1. What are soft markers of aneuploidy?

Q. 2. PCPNDT Act Full form, year of implementation and what are procedures covered?



Q. 3 How would you diagnose early fetal demise?

Q. 4 Describe the sonographic findings of acute and chronic cholecystitis?

Q. 5 Write briefly on ultrasound features of acute appendicitis?

Q. 6. Write a short note on Ultrasound findings in Liver Abscess.

Q. 7. What are the sonographic features of PCOD?

Q. 8. Sonographic features of PID.

Q. 9. Sonographic features of suspected ectopic gestation.

Q. 10. Enumerate different types of Ultrasound Transducers and their specific use.



**ROUGH WORK**

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**ANSWER KEY OF COMPETENCY BASED ASSESSMENT TEST**  
**(SIX MONTHS ULTRASOUND TRAINING RULES AS PER PC-PNDT ACT, 2014**  
**EXAM HELD ON 28.12.2023**

SET-A							
1	A	14	A	27	B	40	D
2	A	15	B	28	A	41	B
3	B	16	A	29	B	42	C
4	D	17	A	30	A	43	B
5	C	18	A	31	A	44	A
6	A	19	D	32	C	45	B
7	D	20	A	33	D	46	C
8	C	21	D	34	A	47	B
9	D	22	B	35	A	48	D
10	D	23	D	36	C	49	D
11	D	24	B	37	A	50	A
12	C	25	C	38	C		
13	C	26	C	39	C		