

## Questions of Iranian Hip Society Board Exam

1- which one is the exact moment arm of abductors in hip joint which must be reconstructed during total hip arthroplasty?

- a- from lateral part of greater trochanter to center of femoral head
- b- from tip of greater trochanter to center of pelvis
- c- from center of rotation of femoral head to plumb line from umbilicus
- d- from center of rotation of one hip joint to the center of rotation of other hip

2- which one can increase abductor lever arm?

- a- coxa breva
- b- posterior positioning of Greater trochanter
- c- destruction of femoral head
- d- coxa vara

3- A patient with hip arthroses has external rotation gait. what is the effect of this type of gait on his limp?

- a- it worsens mechanical component of limp but decreases irritation component of limp
- b- it helps the patient to increase abductor lever arm so decrease the limp
- c- it is a type of antalgic gait so it can decrease limping
- d- it decrease leg length discrepancy so it improves gait

4- Why there is greater risk of posterior dislocation of hip prosthesis when the patient wants to rise from chair?

- a- there is mismatch between gluteal and iliopsoas muscles in this position
- b- there is natural tendency for posterior dislocation of head
- c- there is an extra sagittal force on the head of femur
- d- there is more tension on tensor fascia lata in this position

5- In a post menopausal lady with hip DJD with thin cortex and wide medulla, which type of stem is the choice?

- a- long stem, cemented
- b- standard stem, cemented
- c- long stem, cement less
- d- standard stem, cement less

6- 2 years after insertion of extensively porous coated stem, there is decrease in cortical and cancellous bone density of proximal femur (metaphysis). Which one seems correct ?

- a- this is a sign of infection
- b- this is natural for this type of stem
- c- it shows stem loosening
- d- it is a type of periprosthetic fracture

7- Immediately after implantation of cement less cup, there is a lucency in the polar side of cup. What is the meaning of this?

- a- cup may be oversized
- b- it is a fracture in acetabulum
- c- cup is inserted more vertical than usual
- d- there is excessive ante version of cup

8- Why in cement less stems you can not adjust vertical height by level of neck osteotomy?

- a- because it loses stability of stem if there is short remaining neck

## Questions of Iranian Hip Society Board Exam

- b- because stem fits in metaphysis in cement less stems
- c- because stem may be inserted in varus
- d- because stem may be inserted in valgus

9- what is the difference between stem with 127 degree of neck-stem and a 135 degree?

- a- there is more ante version in 135 degree stem
- b- there is less vertical offset in 135 degree stem
- c- there is more medial offset in 127 degree stem
- d- there is more ante version in 127 degree stem

10- Which one is the benefit of large head prosthesis ?

- a- decrease bone resorption
- b- decrease wear particles
- c- increase thickness of polyethylene liner
- d- increase jump distance

11- Which one can increase range of motion safely in THA?

- a- using round neck stems
- b- using small head
- c- using skirt head
- d- using trapezoidal neck stem

12- Which type of stem do not need distal reaming and only broaching is enough?

- a- single wedge stems (Type 1)
- b- dual wedge stems (type 2)
- c- modular stems( type 5)
- d- anatomic stems ( type 6)

13- What is the desired cement mantle around cemented cups?

- a- uniform 3 mm
- b- uniform 5 mm
- c- scattered 3 mm
- d- patchy 5 mm

14- What is the minimum accepted polyethylene thickness in cement less cups?

- a- 3mm
- b- 5 mm
- c- 7 mm
- d- 10 mm

15- Which one is an absolute contraindication for THA?

- a- young age
- b- urinary tract infection
- c- fused hip
- d- weak abductor of hip joint

16- In U/A exam of 55 years old lady who is candidate for THA , there are 19 WBC in the specimen, she has no symptom of urinary tract. What will you do?

- a- I take a U/C and wait for the result
- b- I start treatment of UTI and postpone THA

## Questions of Iranian Hip Society Board Exam

c- I do my planned THA

d- I do cemented THA with antibiotic loaded cement

17- In a patient with ipsilateral (equal degree) DJD of hip and knee, It is desired to do THA before TKA. Why?

a- THA has better results than TKA

b- THA can alter knee alignment and mechanics

c- THA is more simple than TKA

d- THA is more cost effective than TKA

18- What is the effect of adduction contracture of extremity?

a- true shortening

b- true lengthening

c- apparent shortening

d- apparent lengthening

19- In which case alignment view of lower limbs is more helpful?

a- hip disorder after AVN of neck of femur

b- DJD after previous acetabular surgery

c- hip pain in a patient with dysplastic hip disorder

d- DJD after failure of fixation of proximal femur

20- Which one is the desired position of hip for templating of stem?

a- AP view in neutral rotation

b- AP in 15 degree internal rotation

c- AP in 15 degree abduction

d- AP in 15 degree adduction

21- For templating acetabular component, which one is the medial position of template?

a- obturator foramen

b- ischial spine

c- tear drop

d- acetabular dome

22- During posterior approach to hip for THA, if the head can not be dislocated easily, what you do first?

a- increase internal rotation force

b- release capsule more

c- cut the neck and remove head later

d- close the incision and try another approach

23- in which area, osteophyte removal is necessary to reduce dislocation rate?

a- postero superior

b- postero inferior

c- antero superior

d- antero inferior

24- Intra operatively, Which landmark can show the best position of inferior edge of acetabular cup ?

a- ischial tuberosity

## Questions of Iranian Hip Society Board Exam

- b- ischial spine
- c- transverse acetabular ligament
- d- lesser tuberosity

25- What is the desired position of plug in cemented stems?

- a- at the level of tip of stem
- b- 13 cm below lesser trochanter
- c- 2 cm below the tip of stem
- d- at the isthmus of femur

26- ETO trochanteric slide type (Flip) saves the continuity of which muscles in relation to greater trochanter?

- a- gluteus maximus and vastus lateralis
- b- gluteus medius and vastus medialis
- c- gluteus maximus and vastus intermedius
- d- gluteus medius and vastus lateralis

27- What is the position of limb when you want to reattached Greater trochanter?

- a- 15 degree internal rotation
- b- 15 degree external rotation
- c- 15 degree adduction
- d- 15 degree abduction

28- which one is rare in DJD of hip joint?

- a- lateralization of head by osteophytes
- b- softening of acetabulum
- c- anterior and posterior hip osteophytes
- d- obliteration of cotyloid fossa

29- where is more prone to fracture during THA in arthritic hip?

- a- posterior acetabulum rim
- b- anterior acetabulum rim
- c- acetabular dome
- d- ischial tuberosity

30- which one is more seen in THA after failure of core decompression?

- a- valgus position of stem
- b- varus position of stem
- c- excessive internal rotation
- d- excessive external rotation

31- which one is recommended for removing bone grafts during THA after bone grafting for hip AVN?

- a- curved osteotomes
- b- steinmann pins
- c- high speed burr
- d- ETO

32- In protrusio acetabuli, reaming should be started with:

- a- the most small size reamer to remove fibrous tissue from the depth of cavity
- b- the most large size reamer that fit the opening of acetabulum

## Questions of Iranian Hip Society Board Exam

- c- reverse reaming of acetabulum
- d- a blunt reamer not to protrude in pelvis

33- which parameter of hip can be increased with reconstruction of protrusio acetabuli ?

- a- medial offset of femur
- b- vertical offset of femur
- c- length of the limb
- d- version of femur

34- which one is not a usual problem in surgical correction of Protrusio acetabuli?

- a- dislocation of head of femur
- b- penetration of medial wall of acetabulum
- c- reaming of femoral canal
- d- tension on sciatic nerve

35- for crowe classification in DDH cases, which distance should be measured?

- a- center of rotation to lesser trochanter
- b- medial head-neck junction to inter tear drop line
- c- tip of greater trochanter to medial border of lesser trochanter
- d- center of rotation to inter tear drop line

36- In DDH cases for THA, which part of operation seems easier?

- a- identifying true acetabulum
- b- preparing femoral canal
- c- restoring the length of limb
- d- dislocation of femoral head

37- all of these are advantages of inserting cup in true acetabulum in DDH cases **except?**

- a- can insert larger cups
- b- improve joint reaction forces
- c- limb lengthening
- d- improve abductor function

38- what is the benefit of alignment view in high ride DDH cases before THA?

- a- can show true acetabulum easier
- b- can help the surgeon to decide for location of osteotomy
- c- can show if there is need for acetabuloplasty
- d- can show medial acetabulum bone stock better

39- With which technique you can often manage crowe type 1 cases?

- a- medialization to the floor of acetabulum
- b- acetabuloplasty with autograft from head of femur
- c- dome reconstruction with augment
- d- inserting cup in false acetabulum

40- In severe high riding DDH cases, which one is most unusual?

- a- femur with Dorr type C
- b- coxa valga
- c- more anteversion of femoral neck
- d- shallow acetabulum

## Questions of Iranian Hip Society Board Exam

41- For acetabuloplasty with bone graft in DDH cases, what is the desired orientation of lag screws?

- a- horizontal relative to inter tear drop line
- b- in line with weight bearing forces
- c- transverse from lateral to medial
- d- oblique from superolateral to inferomedial

42- In a mild DDH case, you insert cup in slightly supero medial position. What you should specially check intraoperatively?

- a- tension on sciatic nerve
- b- coverage of cup with bone graft
- c- femoral stem version
- d- femoral pelvic impingement

43- What is the trick for reaming acetabulum in high ride DDH cases for avoiding penetration into pelvis?

- a- select false acetabulum for cup insertion
- b- reverse reaming for impaction and enlargement
- c- start with larger reamers
- d- cover medial side with bone graft

44- You can overcome excessive ante version of femoral neck in DDH cases with all of the tricks below **except**:

- a- modular stem insertion
- b- cemented stem insertion
- c- cutting the neck as low as possible
- d- high offset stem insertion

45- which one is an usual indication for greater trochanter osteotomy in DDH cases?

- a- impingement in adduction
- b- impingement in extension
- c- impingement in external rotation
- d- impingement in flexion

46- In which case you prefer proximal osteotomy and shortening in high riding DDH case for THA?

- a- a woman with genu valgum
- b- a young boy with genu varum
- c- a case of DDH with subtrochanteric malunion
- d- a case of DDH with adduction contracture

47- All of them are usually seen during THA in perthes cases except:

- a- acetabulum retroversion
- b- coxa breva and short neck femur
- c- trochanteric overgrowth
- d- excessive valgus of neck

48- In which cases you predict more metaphyseal- diaphyseal mismatch?

- a- DJD cases
- b- DDH cases
- c- Rheumatoid arthritis cases

## Questions of Iranian Hip Society Board Exam

d- Perthes cases

49- What is the easier technique for solving intra operative greater trochanter impingement in abduction?

- a- use high offset stem
- b- greater trochanter osteotomy and shifting to lateral and distal
- c- subtrochanteric osteotomy
- d- iliac osteotomy

50 - In a case of chondrolysis after surgery for SCFE, you want to do THA. Which deformity is anticipated?

- a- excessive acetabulum anteversion
- b- excessive acetabulum retroversion
- c- excessive femoral anteversion
- d- excessive femoral retroversion

51- In THA for acute femoral neck fracture, which complication is less common?

- a- hematoma formation
- b- dislocation
- c- infection
- d- sciatic nerve injury

52-After failure and cut off of DHS for fixation of intertrochanteric fracture, you decide to do a THA. After reaching the plate, there is a cloudy discharge. what will you do?

- a- take sample for culture, remove the implant and abandon THA
- b- take sample for frozen and continue operation
- c- irrigate the wound with antiseptic solution and continue surgery
- d- do thorough debridement and continue operation with post operative wide spectrum antibiotic coverage

53- In which case you prefer standard stem THA?

- a- neglected femoral neck nonunion
- b- intertrochanteric fracture nonunion
- c- THA after DHS failure
- d- THA in DDH case and nonunion of proximal osteotomy site

54- In THA after failure of acetabular fracture surgery , if there is posterior wall defect, what is the easiest way to manage it?

- a- reconstruction with autograft from head
- b- deepening the acetabulum
- c- reconstruction with augment
- d- acetabular cage for posterior support of cup

55- In THA after failure of acetabular fracture surgery , if plate is exposed, what you should do?

- a- extending the exposure and removing whole plates and screws
- b- cutting and removing the exposed segment of plate only
- c- bending the plate and inserting cemented cup
- d- use bone graft to cover the exposed plate

56- which case can be handled with standard metaphyseal filling stem?

- a- valgus malunion of proximal femur

## Questions of Iranian Hip Society Board Exam

- b- varus remodeling of proximal femur
- c- rotational malunion of proximal femur
- d- diaphyseal malunion

57- In THA of malunited fracture of proximal femur metaphysis, for managing rotational deformity of proximal femur, which technique is the least desired one?

- a- cementing a small stem in proper rotation
- b- stem with diaphyseal fixation
- c- repeat osteotomy at metaphyseal level
- d- subtrochanteric osteotomy

58- For correcting diaphyseal malunion with more than 50% translation and severe angulation, after subtrochanteric osteotomy, you are faced with rotational instability of proximal fragment. Which trick should be the last option?

- a- oblique osteotomy
- b- step cut osteotomy
- c- additional fixation with strut allograft and wiring
- d- cementing the stem

59- If there is an ankylosed hip in external rotation, which approach to neck is most difficult?

- a- posterior approach
- b- direct lateral approach
- c- anterolateral approach
- d- direct anterior approach

60- The limb is shorter than the other side in fused hips. The reasons are following except:

- a- the procedure of fusion itself
- b- flexion contracture
- c- abduction position of limb
- d- original disorder of joint which lead to fusion

61- For overcoming flexion contracture in patients undergoing THA with neuromuscular disorder, all of these are correct except:

- a- doing THA from posterior approach
- b- releasing and cutting anterior capsule
- c- releasing and cutting iliopsoas
- d- using more offset stems

62- During THA procedure, there is a bleeder near transverse acetabular ligament. Which one is the probable source of bleeding?

- a- branches of iliac vessels
- b- branches of femoral artery
- c- branches of obturator vessels
- d- branches of inferior gluteal artery

63- If there is hematoma formation in surgical wound, which one should not be done?

- a- removing some sutures in the ward and squeezing the wound
- b- discontinuing anticoagulants
- c- frequent dressing
- d- treating coagulopathies



## Questions of Iranian Hip Society Board Exam

64- All of these are correct about heterotypic ossification after THA except:

- a- radiation exposure in cementless THA is forbidden at all
- b- best time for radiation is more than 8 hours preoperatively and more than 72 hours postoperatively
- c- hypertrophic osteoarthritis is a risk factor for HO
- d- it is seen not frequent in posterior approach

65- What is the best time for ambulating patients after THA for DVT prophylaxis?

- a- as soon as patient condition permits
- b- the day after operation
- c- 48 hours postoperatively
- d- after discontinuing drains

66- Which anticoagulant is the most difficult to handle?

- a- LMWH
- b- unfractionated heparin
- c- aspirin
- d- warfarin

67- After THA with over lengthening of limb, there is sciatic nerve palsy. What is the best treatment?

- a- appropriate lift for shorter limb
- b- revision and use shorter modular head
- c- use abduction brace
- d- revision and use high offset stem

68- In which approach there is more risk of injury to superior gluteal nerve?

- a- direct anterior approach
- b- anterolateral approach
- c- direct lateral approach
- d- posterior approach

69- How far proximal to greater trochanter is the safe zone for splitting gluteus medius not to damage superior gluteal nerve?

- a- less than 3 cm
- b- less than 5 cm
- c- less than 7 cm
- d- there is no limit

70- During THA, in which quadrant you can feel tip of drill bit when you want to insert transacetabular screw for fixation of cup?

- a- antero inferior
- b- anterosuperior
- c- posteroinferior
- d- posterosuperior

71- All of these can result in over lengthening of limb after THA except:

- a- inferior displacement of center of rotation
- b- insufficient resection of bone from neck of femur
- c- use of long modular head
- d- use of high offset stem

## Questions of Iranian Hip Society Board Exam

72- What is the best strategy for preventing leg length discrepancy in THA?

- a- preoperative templating
- b- intraoperative measurement
- c- combination of preoperative templating and intraoperative measurement
- d- judgement with soft tissue tension after insertion of components

73- How much LLD can be tolerated well?

- a- less than 1 cm
- b- less than 2 cm
- c- less than the distance from greater trochanter to lesser trochanter
- d- less than height of the thumb of patient

74- In posterior approach , which malpositioning of cup is more common?

- a- retroversion
- b- anteversion
- c- vertical position
- d- horizontal position

75- which radiography can show inclination of cup easier?

- a- OBTURATOR VIEW
- b- iliac view
- c- AP view of pelvis
- d- cross- table lateral view

76- if the cup is inserted more horizontal than usual, there is risk of dislocation in which direction?

- a- superior
- b- inferior
- c- anterior
- d- posterior

77- which one has more potential for dislocation?

- a- trapezoidal neck
- b- high offset stem
- c- large head diameter
- d- skirted long head

78- what is the most important task of orthopedic surgeon when facing with a B1 periprosthetic femur fracture?

- a- to confirm the stability of stem
- b- to confirm the quality of bone of femur
- c- to confirm the fracture line orientation
- d- to confirm the quality of stem itself

79- When chronic periprosthetic infection is in doubt, which one is less help full?

- a- ESR
- b- CRP
- c- Hip aspiration
- d- bone scan

## Questions of Iranian Hip Society Board Exam

80- If you want to aspirate joint for R/O of infection after THA, all of these are correct except:

- a- It is necessary to discontinue antibiotics for 2 weeks before aspiration
- b- It is better to do it under guide of fluoroscopy
- c- It should be done under General anesthesia
- d- glucose of fluid should be assessed

81- Which one is not a sign of loosening?

- a- subsidence of stem and cement in cemented THA
- b- subsidence of cement less stem in early post operative period
- c- subsidence of cement only in cemented THA
- d- subsidence of stem in cement mantle in early post operative period

82- Which one is more important in urgent management of loosening?

- a- symptoms
- b- bone destruction
- c- body weight
- d- height

83- If there is pain immediately after operation, which one is less probable?

- a- aseptic loosening
- b- infection
- c- non fixed implants
- d- referral pain from spine or knee

84- which one determines definitive size of cup?

- a- superoinferior diameter of acetabulum
- b- anteroposterior diameter of acetabulum
- c- mediolateral diameter of acetabulum
- d- oblique diameter of acetabulum

85- Which one has no role for peripheral fixation of cup?

- a- acetabular dome
- b- ischial buttress
- c- quadrilateral plate
- d- posterior column

86- All of these are appropriate for management of posterior column defect except:

- a- Bone cement
- b- segmental allograft
- c- Buttress augment
- d- high hip center implantation of cup

87- If there is pelvic discontinuity and minimal bone loss in healthy bone, what is your preferred treatment?

- a- antiprotrusio cage
- b- osteosynthesis with plate and inserting cement less cup
- c- distraction method
- d- cup-cage

88- What is the preferred management of malunited femur in subthrochanteric area during THA?

## Questions of Iranian Hip Society Board Exam

- a- neglecting the deformity and inserting short stem THA
- b- inserting stem with cement in proximal segment
- c- corrective osteotomy and doing THA in second stage after union of osteotomy site
- d- subtrochanteric corrective osteotomy and inserting long stem THA

89- For management of femoral deficiency with tapered fluted stems, if you can not get enough scratch fit in distal segment, what is the main risk?

- a- fracture of distal segment
- b- stem subsidence
- c- stem deformation
- d- stem breakage

90- What is the preferred time for starting rehabilitation in THA?

- a- before operation
- b- evening of operation day
- c- one day after operation
- d- after complete wound healing

91- A victim of car -car accident has pelvic tenderness and he is in shock state. In radiography, there is sever diastasis of symphysis pubis. All of these are in first line of management except:

- a- pelvic binder
- b- anterior external fixator
- c- anti shock trousers
- d- open reduction and fixation

92- There is vertical sacral comminuted fracture as a part of pelvis fracture. Which one is your preferred definitive fixation technique?

- a- iliosacral fixation screw ,distal threaded
- b- transiliac rod
- c- trans iliac plate
- d- C clamp

93- Before open reduction and fixation of symphysis pubis diasthesis, which one is necessary?

- a- NG tube
- b- rectal tube
- c- urinary catheter
- d- condom sheet

94- Which one need buttress plate fixation?

- a- posterior wall fracture
- b- posterior column fracture
- c- anterior column fracture
- d- symphysis diasthesis

95- Which one can not be fixed percutaneously and it is better to managed with open reduction and internal fixation?

- a- posterior column fracture
- b- posterior wall fracture
- c- superior ramus fracture
- d- iliac wing fracture

## Questions of Iranian Hip Society Board Exam

96- What is the treatment of choice for subtrochanteric fracture in 79 years old lady?

- a- DHS
- b- DCS
- c- impaction nail
- d- reconstruction nail

97- Which part can show perfect reduction of intertrochanteric fracture?

- a- posteromedial cortex
- b- anteromedial cortex
- c- lateral cortex
- d- medial cortex

98- All of these are necessary for success in valgus osteotomy for nonunion of neck of femur except:

- a- intact cartilage of head
- b- good bone stock of head
- c- viable head
- d- age below 40 years

99- Which one cannot be fixed by ilioinguinal approach?

- a- anterior column
- b- iliac wing
- c- quadrilateral plate
- d- superior ramus

100- Which one can be fixed only from posterior approach?

- a- posterior column fracture
- b- posterior wall fracture
- c- anterior column fracture
- d- anterior wall fracture

## Questions of Iranian Hip Society Board Exam

question number	answer		
1	a		
2	d		
3	a		
4	c		
5	b		
6	b		
7	a		
8	b		
9	c		
10	d		
11	d		
12	a		
13	a		
14	b		
15	b		
16	c		
17	b		
18	c		
19	c		
20	b		
21	c		
22	b		
23	d		
24	c		
25	c		
26	d		
27	d		
28	b		

## Questions of Iranian Hip Society Board Exam

29	b		
30	b		
31	c		
32	b		
33	c		
34	c		
35	b		
36	d		
37	a		
38	b		
39	a		
40	a		
41	b		
42	d		
43	b		
44	d		
45	c		
46	c		
47	d		
48	d		
49	a		
50	d		
51	d		
52	a		
53	a		
54	b		
55	b		
56	d		
57	c		

## Questions of Iranian Hip Society Board Exam

58	d		
59	a		
60	c		
61	a		
62	c		
63	a		
64	a		
65	a		
66	d		
67	b		
68	b		
69	b		
70	c		
71	d		
72	c		
73	a		
74	a		
75	c		
76	d		
77	d		
78	a		
79	d		
80	d		
81	b		
82	b		
83	a		
84	b		
85	c		



## Questions of Iranian Hip Society Board Exam

86	a		
87	b		
88	d		
89	b		
90	a		
91	d		
92	c		
93	c		
94	a		
95	b		
96	c		
97	b		
98	d		
99	c		
100	b		